

Analysis Report

**Responses to the call for
feedback**

on

**“Mission-Oriented Research &
Innovation in the European
Union”**

by Mariana Mazzucato

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Analysis Report – Responses to the call for feedback on “Mission-Oriented Research and Innovation in the European Union” by Mariana Mazzucato

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KEY CONCLUSIONS

All five **selection criteria** of Research and Innovation (R&I) missions put forward by Mariana Mazzucato in her Missions Report are strongly supported by stakeholders (89%-72% mark them as 'very important' or 'rather important'). Stakeholders raise most recurrently the following concerns and observations:

- Scientific excellence, EU added value and European competitiveness aspects are missing from the proposed criteria.
- Not all five criteria can be applied to an equal degree to all missions.
- R&I missions should feature novelty and foundational character targeting social and cultural transformations.
- Disruptive innovations emerge unexpectedly and 'time-bound' criteria may need to take into account smaller steps of progress and longer-term perspectives. Societal change is a non-linear, complex process with many unknowns and not a direct causal chain, hence there is a need to address uncertainty and unknowns in R&I missions.
- Attention is needed to the trade-off of goals and difficulties embodied in the management, monitoring and evaluation of interventions in complex socio-technical systems.

The four proposed **implementation aspects** of R&I mission are widely supported by stakeholders (84%-75% mark them as 'very important' or 'rather important'). Stakeholders most recurrently include the following remarks:

- Flexibility is very important as it includes a room for failure as an important learning experience.
- A pilot should be launched to test the mission-oriented approach.
- A prime concern is to ensure that participation is open to newcomers.
- Pro-active management should include outcome and knowledge synthesis across individual projects to inform policy and practice.
- There is a necessity to develop new indicators and qualitative assessment relevant for scoping societal and cultural impact.
- There is a need for more reciprocal trust between the funding authority and research performers.
- More reflexivity is needed in the whole evaluation process.

Stakeholder opinions differ on the question of **citizen consultation** in the choice of R&I missions. Around 69% of all survey respondents agree or strongly agree to this statement, while 28% have an opposite view.

- Stakeholders call to find appropriate, meaningful and elaborated ways for public engagement.
- The suggested mechanisms for citizen consultation include living labs, citizen conventions, Civil Society High Level Group and other new methods of user-centred design for feedback, in particular by applying information and communication technologies.

Mission proposals were received via the online survey and position papers. Overall, the proposals featured Horizon Europe Clusters as follows: 1. Health (22%), 2. Inclusive and secure society (16%), 3. Digital and industry (27%), 4. Climate, energy and mobility (19%), 5. Food and natural resources (16%). The following groupings of Horizon Europe Intervention areas have been proposed most frequently: Digitalisation (13%), Health and wellbeing (10%) and Social and economic transformation (10%).



Figure 5: Frequency of the proposed mission areas in survey responses and stakeholder position papers (cfr. p24)

- The most frequent themes from survey proposals are: Digitalisation (14%), Health and well-being (11%), Social and economic transformations (10%), Sustainable production (7%), Transport and mobility (6%), Diseases (6%), Energy production and consumption (6%).
- Position papers feature the following Horizon Europe Intervention areas most prominently: Tools, technologies and digital solutions for health (17%), Digital technologies (15%), Social and economic transformations (15%), Non-communicable and rare diseases (11%), Food systems (10%), Energy supply (10%).

- The most prominent cross-links in all mission proposals (co-occurrences) can be observed between the following groupings of Intervention areas defined in the Horizon Europe proposal. For a full overview of all Clusters and Intervention areas refer to page 19-20 of this report.
 - Sustainable production (cluster 3) - Bioeconomy (cluster 5)
 - Sustainable production (cluster 3) - Biodiversity and natural capital (cluster 5)
 - Sustainable production (cluster 3) – Energy production and consumption (cluster 4)
 - Security (cluster 2) - Digitalisation (cluster 3)
 - Social and economic transformations (cluster 2) – Digitalisation (cluster 3)
 - Climate science and solutions (cluster 4) – Biodiversity and natural capital (cluster 5)
 - Climate science and solutions (cluster 4) – Food and agriculture (cluster 5)
 - Health and wellbeing (cluster 1) – Social and economic transformations (cluster 2)
 - Health and wellbeing (cluster 1) – Food and agriculture (cluster 5)
 - Health and wellbeing (cluster 1) – Digitalisation (cluster 3).

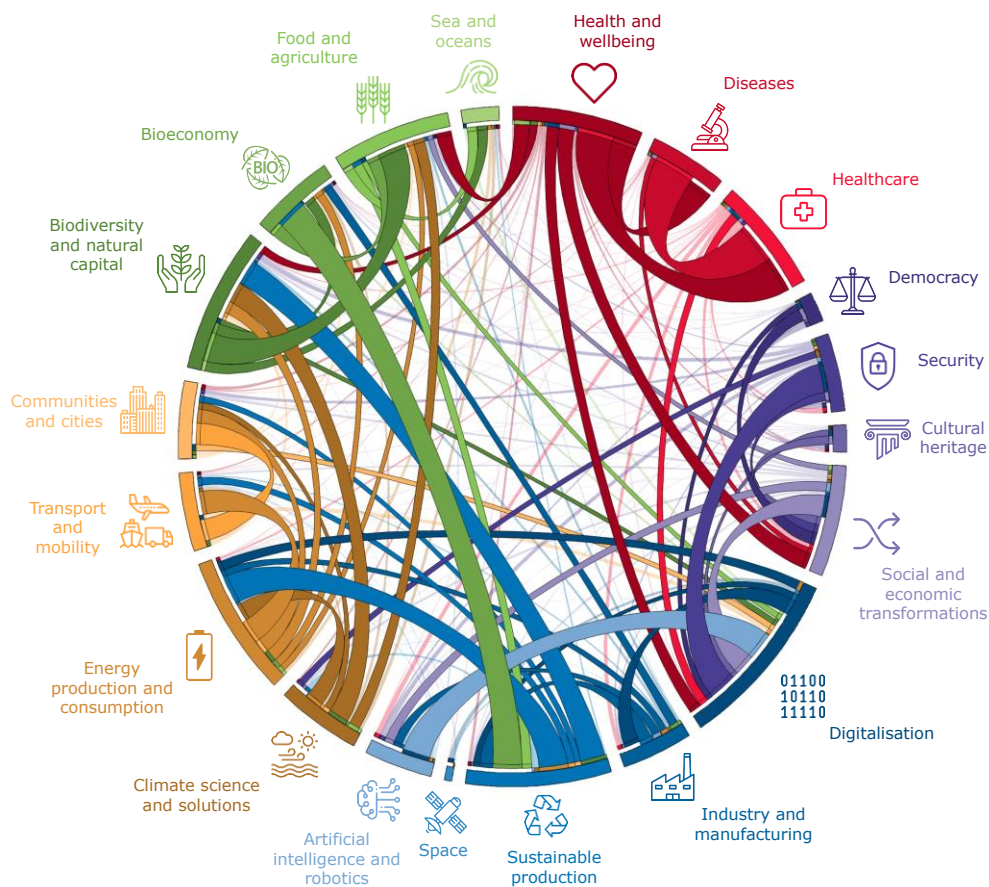


Figure 6: Cross-links between Horizon Europe Clusters and Intervention area groupings in all stakeholder contributions (cfr p 25)

- The most prominent cross-links of SDG codes in stakeholder position papers are:
 - SDG 9: Industry, innovation & infrastructure - SDG 3: Good health and wellbeing for people
 - SDG 9: Industry, innovation & infrastructure - SDG 7: Affordable and clean energy
 - SDG 9: Industry, innovation & infrastructure - SDG 11: Sustainable cities and communities
 - SDG 9: Industry, innovation & infrastructure - SDG 12 Responsible consumption and production
 - SDG 9: Industry, innovation & infrastructure - SDG 16: Peace, justice and strong institutions
 - SDG 12: Responsible consumption & production - SDG 7: Affordable and clean energy
 - SDG 12: Responsible consumption & production - SDG 2: Zero hunger
 - SDG 2: Zero hunger and SDG 3: Good health and wellbeing for people.

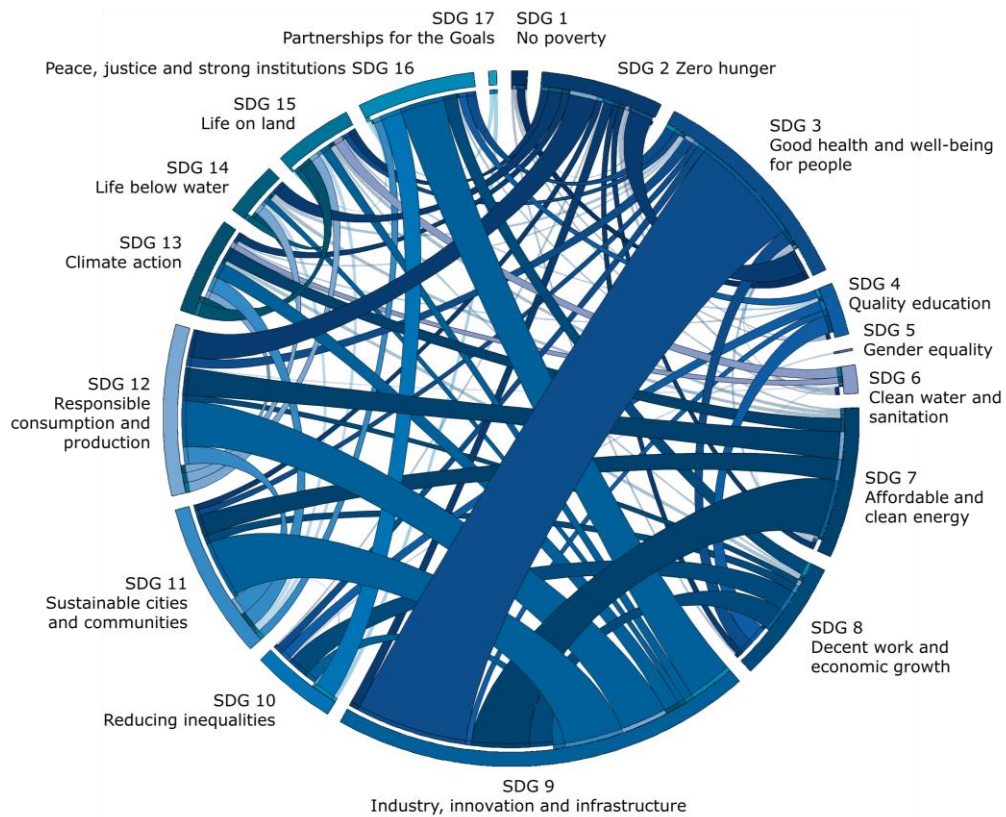


Figure 12: SDG code co-occurrence in mission proposals from stakeholder position papers (cfr. p.31)

ANALYSIS

1 Introduction

A High Level Group of experts chaired by Pascal Lamy was convened to suggest measures how to maximise the impact of the next Framework Programme for Research and Innovation (R&I). The Lamy Report¹ issued in July 2017 called for prioritising investments in areas where the EU added value is the greatest in terms of the degree of risk involved and where the benefits of economies of speed, scale and scope can be reaped. The expert group suggested that the next EU R&I programme should translate global societal challenges into a limited number of large-scale R&I 'missions' that would define expected impacts across an entire portfolio of activities, rather than at the level of individual call topics. The report highlighted that these R&I missions, or 'moon shots', should have a breakthrough or transformative potential for science, technology, industry or society taking the UN Sustainable Development Goals (SDGs) as a global reference framework for their selection.

The European Commissioner for Research, Science and Innovation, Carlos Moedas, invited the Professor Mariana Mazzucato to draft strategic recommendations on mission-oriented research and innovation in the EU. The Mazzucato Report², presented in February 2018, detailed the rationale for EU level R&I mission, expanded the concept, put forward key criteria for the selection of missions and outlined important considerations for their successful implementation. A wide-scale public consultation was launched to gather reactions to the proposed R&I mission selection criteria and their implementation modalities, as well as to source stakeholder ideas for concrete mission proposals. This report provides a **synthesis on the results of the call for feedback on the Mazzucato Report comprising results from the online survey and the submitted stakeholder position papers.**

2 Stakeholder contributions

The online survey was open between 22 February and 4 April 2018. A total of 1190 valid replies have been received to this call for feedback. Figure 1 shows the distribution of replies according to the type of stakeholders. Around 44% of all replies represent the views of university stakeholders and 23% come from research organisations. Business and industry replies constitute 13% of all answers. Only 6% of all replies come from non-governmental organisation and 5% from public authorities. The remaining 9% of entries reflect the views of other organisations (e.g. various public-private partnerships and organisations that span across a number of abovementioned stakeholder groups).

From all the replies to the online survey, more than half (54%) are representing views of individual respondents. An absolute majority of these individuals (98%) have indicated the type of stakeholder they are associated with (e.g. university, research organisation, business or industry), thus their replies are counted towards the respective category of stakeholders. From the remainder of entries, 38% are representing the views of a single institution/company and 8% are entered on behalf of an EU umbrella institution.

¹ Lamy, P. et. al. (2017) LAB-FAB-APP: Investing in the European future we want. Report for the Directorate-General for Research and Innovation of the European Commission
<https://ec.europa.eu/research/evaluations/index.cfm?pg=hlq>

² Mazzucato, M. (2018) Mission-Oriented Research & Innovation in the European Union: A problem-solving approach to fuel innovation-led growth. Report for the Directorate-General for Research and Innovation of the European Commission <https://publications.europa.eu/en/publication-detail/-/publication/5b2811d1-16be-11e8-9253-01aa75ed71a1/language-en>

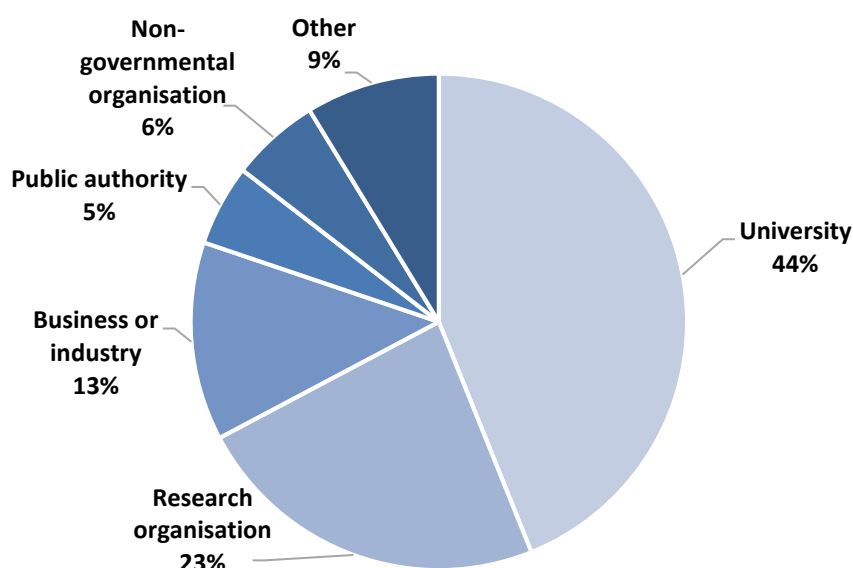


Figure 1: Types of stakeholders replying to the online survey

There is almost an equal split between the survey replies from stakeholders that have benefitted from Horizon 2020 funding and those that have not (see Table 1). The majority of responding research organisations (72%) and public authorities (63%) have benefitted from Horizon 2020. Most of NGOs (71%) and other organisations (64%) replying to this call for feedback have not received support from the current Framework Programme.

Stakeholder group	YES	NO
University	47%	53%
Research organisation	72%	28%
Business or industry	52%	48%
Public authority	63%	37%
Non-governmental organisation	29%	71%
Other	36%	64%
All stakeholders	52%	48%

Table 1: Share of survey respondents as beneficiaries of Horizon 2020

In addition to survey replies, the analysis of the call for feedback also comprised dedicated stakeholder position papers. In total, position papers from 160 stakeholders have been included in the analysis³, of which 17 included statements only on more general considerations and mission selection criteria. From these contributions, 150 position papers were uploaded as attachments to the survey responses. Some 20 position papers dedicated to the topic of R&I missions have been sent directly to the European Commission or attached to a previous EC online survey on EU funds that closed on 10 April 2018.

³ Note that some stakeholders submitted more than one position papers dedicated to the topic of R&I missions. In further analysis all contributions from one stakeholder were merged into one file.

As shown in Figure 2, research organisations have been the most active stakeholder group in submitting position papers. Their contribution constitutes 30% of all position papers. Universities (20%), business or industry (17%) and other organisations (15%) also have been active in providing elaborated positions on this topic. Public authorities (9%) and NGOs have been slightly less represented among all the written contributions.

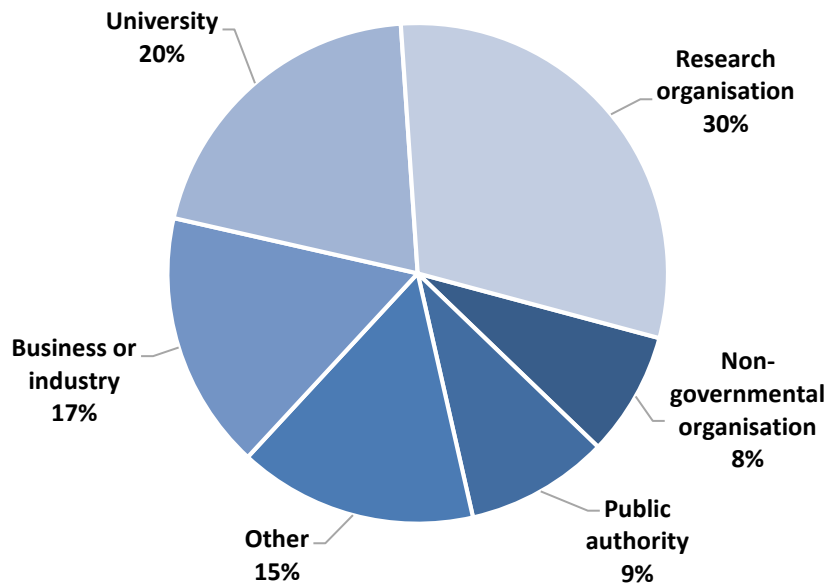


Figure 2: Submitted position papers per stakeholder group

3 Criteria for the selection of R&I missions

Mazzucato Report put forward five criteria for selecting R&I missions. According to this proposal, missions should fulfil the following key criteria:

1. **Bold, inspirational with wide societal relevance** - they should touch the lives of, or inspire, a significant part of the European population;
2. **A clear direction: targeted, measurable and time-bound** – they should allow determining success (or failure), or measure progress towards success;
3. **Ambitious but realistic research & innovation actions** – they should be framed to be high-risk but also realistically feasible, at least in theory, in the given time period;
4. **Cross-disciplinary, cross-sectoral and cross-actor innovation** – they should use a problem focused lens and not a sectoral lens;
5. **Multiple, bottom-up solutions** – they must be open to being addressed by different types of solutions.

Survey respondents were asked to rate the abovementioned five criteria according to their relevance (from 1=Not at all important to 4=Very important). The overall result of this rating is summarised in Figure 3. **Stakeholders consider all five selection criteria as 'very important' or 'rather important'**. The highest importance is awarded to the criterion 3 and the criterion 1. The criteria 5 and 2 are also ranked as important. Criterion 4 was perceived as slightly less important.

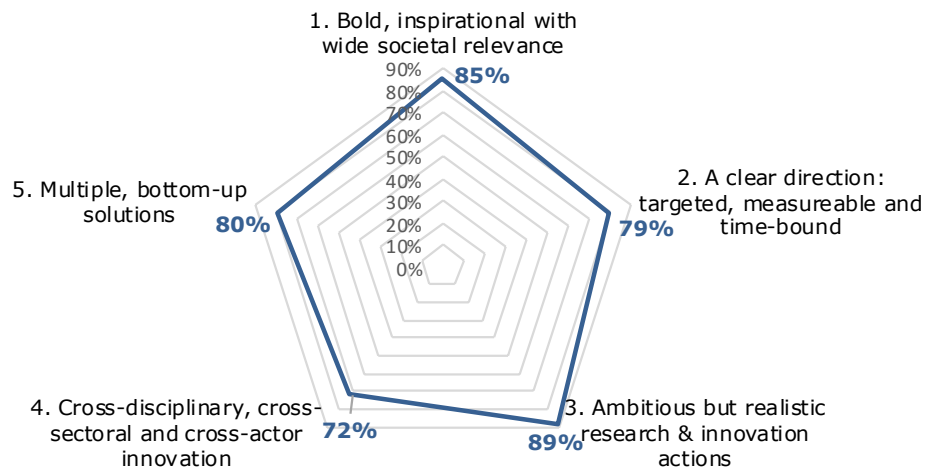


Figure 3: Respondent rating of the five mission selection criteria (share of answers marked as 'very important' or 'rather important')

Survey answers show that there is a wide agreement among all stakeholder groups that missions should have ambitious but realistic R&I actions (criterion 3) and they should be bold, inspirational with wide societal relevance (criterion 1). These criteria are judged as important or very important by respectively 89% and 85% of all respondents. Table 2 and Table 3 summarise survey responses on these two questions relatively across all stakeholder groups. The data shows that there are no notable differences in the judgements of the main stakeholder groups regarding the importance of these two criteria.

Stakeholder	Very important	Rather important	Rather not important	Not important	Don't know
University	60%	28%	9%	3%	1%
Research organisation	65%	25%	7%	2%	1%
Business or industry	69%	23%	5%	3%	0%
Public authority	62%	26%	11%	0%	0%
Non-governmental organisation	58%	33%	3%	6%	0%
Other	59%	30%	6%	3%	2%
All stakeholders	62%	27%	7%	3%	1%

Table 2: Respondent rating on criterion 3. Ambitious but realistic research & innovation actions

Stakeholder	Very important	Rather important	Rather not important	Not important	Don't know
University	54%	30%	11%	5%	1%
Research organisation	61%	23%	12%	4%	1%
Business or industry	57%	28%	11%	3%	1%
Public authority	62%	30%	5%	3%	0%
Non-governmental organisation	67%	21%	8%	3%	2%
Other	69%	22%	6%	2%	2%
All stakeholders	58%	27%	10%	4%	1%

Table 3: Respondent rating on criterion 1. Bold, inspirational with wide societal relevance

Stakeholders comment that **R&I missions should feature novelty and foundational character targeting social and cultural transformations**. Some note that R&I missions should not be just ambitious, but very ambitious hinting that 'mission' in the literal meaning of the word implies an absence of pragmatism. A pan-European network organisation of academic institutions strongly recommends "*emphasising a culture of experimentation and risk-taking as crucial elements in the philosophy of a bold mission*".

More critical stakeholders highlight that '**ambitious but realistic**' is a **contradictory objective** and questions the authority of evaluators to decide what is realistic when it comes to innovation and transitions. Others caution that societal relevance is important, but should not be stifling. Great advancement in science is often achieved in areas where the societal relevance is far from clear at the moment of research. Stakeholders also occasionally indicate that bold missions should be matched by equally bold funding allocations.

The recognition that R&I missions should be **bottom-up and foster multiple solutions (criterion 5)** is considered important and very important by 80% of all stakeholder groups. Around 3% of respondents (the highest share among all five criteria) could not specify their answer to this question. There is a rather equal distribution of ratings among all stakeholder groups. Most positive are public authorities – 90% have ranked this aspect as important or very important (see Table 4).

Stakeholder	Very important	Rather important	Rather not important	Not important	Don't know
University	49%	30%	13%	5%	3%
Research organisation	48%	34%	14%	2%	3%
Business or industry	41%	36%	18%	4%	1%
Public authority	50%	40%	10%	0%	0%
Non-governmental organisation	42%	36%	19%	1%	1%
Other	47%	32%	13%	4%	5%
All stakeholders	47%	33%	14%	4%	3%

Table 4: Respondent rating on criterion 5. Multiple bottom-up solutions

The criterion that missions should have **A clear direction: targeted, measurable and time bound (criterion 2)** is rated as important or very important by 79% of all survey respondents. The relative data (see Table 5) show that university stakeholders are somewhat more cautious than the rest of the stakeholder groups marking this criterion with a slightly lower relevance. Around 72% from university stakeholder answers rank the criteria as important or very important, while 28% have marked this aspect as rather not important or not important at all.

Stakeholder	Very important	Rather important	Rather not important	Not important	Don't know
University	38%	34%	19%	9%	0%
Research organisation	51%	33%	11%	5%	0%
Business or industry	64%	23%	7%	5%	1%
Public authority	62%	28%	5%	5%	0%
Non-governmental organisation	60%	28%	3%	9%	0%
Other	47%	32%	17%	2%	2%
All stakeholders	48%	31%	14%	7%	0%

Table 5: Respondent rating on criterion 2. A clear direction – should be targeted, measurable and time-bound

While recognising the relevance of this criterion in general, stakeholders remind that disruptive innovations emerge unexpectedly and 'time-bound' criteria may need to take

into account smaller steps of progress and longer-term perspectives. Many of the selected missions may take longer periods of implementation than the seven years programmed under Horizon Europe. Stakeholders voice concerns that any absolute adherence to a strict numerical sense of achieving targets can endanger the intended mission-oriented approach. **Transformation is a messy, complex process with many unknowns and not a direct causal chain**, hence there is a need to think how better to address uncertainty and unknowns in R&I missions.

Attention is also called to the problems related to **conflicting goals and difficulties embodied in the management, monitoring and evaluation of interventions in complex socio-technical systems**. Some stakeholders express openly their disbelief that a single R&I mission is the right tool to achieve the desired impact. For example, a large network organisation of research institutes and universities doubts that *“discrete missions embedded in a research and innovation programme alone are capable of achieving a significant and measurable impact in terms of realising the necessary actions”*.

The statement that R&I missions should be **cross-sectoral, cross-disciplinary and cross-actor (criterion 4)** has been ranked with a lower relevance relatively to the four former criteria. Around 72% of all respondents have marked it as important or very important, while 28% have said it is rather not important or not at all important. Some 63% of all public authorities that responded to the survey consider this factor very important. Universities are again more sceptical than other stakeholders with 66% respondents marking this criterion as important and very important and 33% considering this aspect rather not important or not at all important (see Table 6).

Stakeholder	Very important	Rather important	Rather not important	Not important	Don't know
University	37%	29%	23%	10%	1%
Research organisation	41%	32%	19%	7%	1%
Business or industry	44%	30%	20%	5%	0%
Public authority	63%	18%	13%	6%	0%
Non-governmental organisation	50%	33%	12%	5%	0%
Other	48%	35%	9%	4%	5%
All stakeholders	42%	30%	20%	8%	1%

Table 6: Respondent rating on criterion 4. Cross-disciplinary, cross-sectoral and cross-actor innovation

Stakeholders call for reconsideration of the phrasing of this criterion noting that more important than cross-disciplinarity as such is the **need to include competences and capacities from a variety of fields**, and to involve different actors and stakeholders. Thus cross-disciplinarity should be welcomed, but should not be mandatory per say as it is a useful approach in providing solutions for many but not all problems. Some solutions can also be found employing insights from multiple single disciplines without their integration. Other respondents mention that R&I mission criteria should **outline the expected degree of cross-disciplinarity, cross-sectoriality and cross-actor actions**.

Other overarching comments on the five criteria proposed by the Mazzucato Report flag the need to recognise that **not all five criteria can be applied in an equal degree to all missions**. Some differentiation must be considered. While some stakeholders hold a firm opinion that missions should go beyond technology and include also infrastructural, legislative and behavioural change, others remind that research and innovation can only provide avenues for solutions, but cannot be held solely responsible for the success in uptake and diffusion of these solutions.

Stakeholder comments and position papers echo that **scientific excellence, EU added value and European competitiveness** aspects are missing from the proposed criteria. For example, a pan-European network of regions stresses: *“The mission approach should consider Europe’s competitive edge on the global stage. It is essential to identify poles of*

European excellence and global competitiveness. This is to ensure that when we arrive at European solutions to global problems, they are adequately framed in the perspective of global leadership”.

A research and consultancy firm specialising in R&I field summarises the inherent dilemmas in the five proposed selection criteria: *“The mission, while being a broad statement, also holds the risk of being too abstract to be targeted, measurable and time-bound. Furthermore, the notion of multiple bottom up solutions may counter to the expectation of realistic actions since if it is known to be realistic then why would multiple paths be needed. Ultimately the missions being bold they also entail the risk and uncertainty, for instance suggesting difficulties in setting the right time-bound criteria at the outset”.*

4 Implementation modalities of R&I missions

Mazzucato Report also underlines that future mission will also require new approaches to implementation. The learning from successful mission-oriented organisations around the world indicates the following four implementation aspects as necessary:

1. **Engagement of diverse national and regional stakeholders** – mission objectives should provide legitimacy and requires a broader political commitment to align policy objectives at all levels;
2. **Measurement and impact by goals and milestones** – use of intermediate milestones is critical and broader measures of the cross-sectoral and cross-science impact are needed;
3. **A portfolio of instruments to foster bottom-up solutions** – managed to stimulate interaction, experimentation and cross-learning;
4. **Flexibility, pro-active management and building in-house capabilities** – there should be a possibility to increase the budget for a mission if there are indications that extra investment could make the difference in reaching the objective; public institutions in charge of missions should build dynamic organisational capabilities.

Survey respondents were asked to rank these four implementation aspects according to their importance (from 1=Not at all important to 4=Very important). Figure 4 reflects the share of answers marked as ‘very important’ and ‘rather important’. Similarly as with the selection criteria, **stakeholders consider all four implementation aspects important**. The highest importance is awarded to aspect 4 and aspect 2. Aspects 1 and 3 are also judged as very important with only slightly lower overall rating.

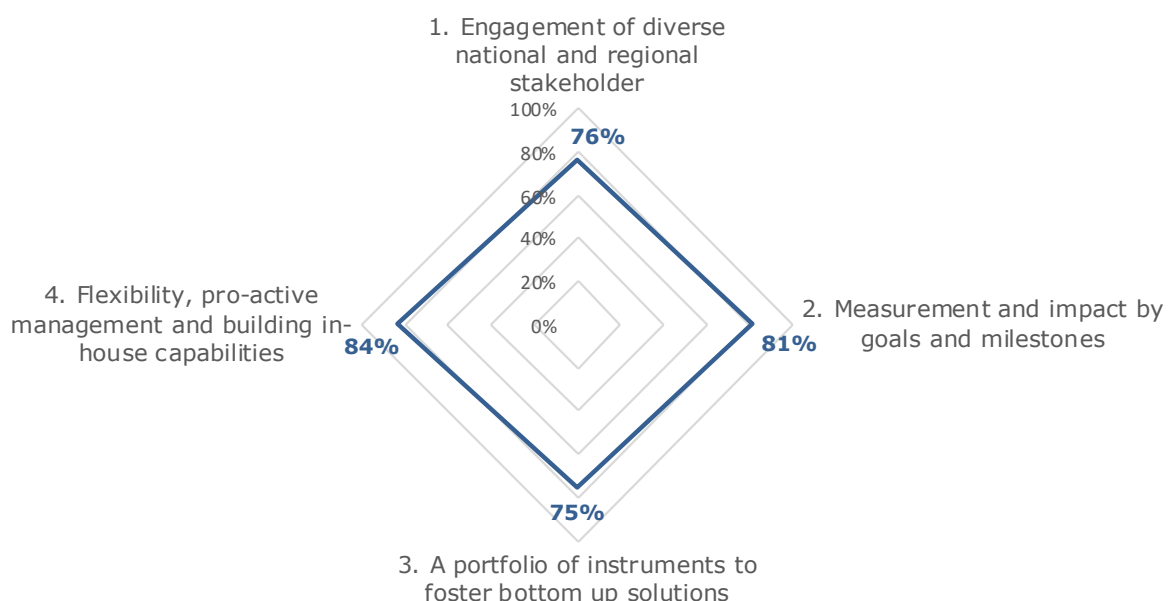


Figure 4: Respondent rating of the four mission implementation aspects (share of answers marked as ‘very important’ or ‘rather important’)

The implementation aspect that R&I missions should have **flexibility, with pro-active management and building in-house capacities (aspect 4)** is marked as important or very important by 84% of all respondents. There are no substantial differences among the opinions of various stakeholder groups (see Table 7). Around 4% of all respondents found it hard to answer this question, in particular other organisations (13%), research organisations (6%) and non-governmental organisations (5%).

Stakeholder	Very important	Rather important	Rather not important	Not important	Don't know
University	50%	32%	10%	5%	3%
Research organisation	53%	31%	9%	1%	6%
Business or industry	56%	36%	6%	1%	1%
Public authority	44%	41%	15%	0%	0%
Non-governmental organisation	47%	35%	11%	3%	5%
Other	42%	37%	5%	3%	13%
All stakeholders	51%	33%	9%	3%	4%

Table 7: Respondent rating on implementation aspect 4. Flexibility with pro-active management and building in-house capabilities

Stakeholders underline that flexibility is very important as it includes a **room for failure that is an equally important learning experience**, for example, in innovation upscaling and replication processes. Other contributors call for a recognition that **flexibility and pro-active management are frequently mutually exclusive**. Stakeholder comments hint that in some cases pro-active management may have negative effects such as increasing bureaucracy and suppressing highly relevant but unforeseen developments.

Indicating that there is a substantial learning to be accumulated on the governance of R&I missions, a number of stakeholders advocate for launching a **pilot to test the mission-oriented approach** before it becomes a fully-fledged part of the programme. A responding university adds further questions on the governance, namely, *“Will there be opportunities for projects to engage within missions to aid joint learning? Will there be mission leads who can work across missions?”*.

On a strategic level, one regional administration is concrete: *“We prefer the **Commission to take up the ownership and management of the missions**. Thereby, one could imagine a ‘Missions unit’ in DG RTD with newly appointed high-profile ‘mission-owners’ with a political coordination and communication role that act as ambassadors for the cause”*. Other stakeholder adds an idea that an independent and global board of scientists could serve as an advisory and appeal body in case of doubt and/or conflict. It is also underlined that EC portfolio managers should have a very good expertise and overview on research and innovation activities undertaken within missions. **Pro-active management should include outcome and knowledge synthesis** across individual projects to inform policy and practice.

The statement that R&I missions should have a **clear goal and milestones to measure impact (aspect 2)** is also strongly supported by stakeholders with 81% of all respondents marking it as important or very important. Public authorities are the strongest supporters of this criterion (74% mark it as very relevant), while universities express somewhat less assertive support to this statement with 34% ranking it as rather not important or not at all important (see Table 8).

Stakeholder	Very important	Rather important	Rather not important	Not important	Don't know
University	40%	36%	17%	7%	0%
Research organisation	55%	28%	13%	3%	1%
Business or industry	66%	25%	7%	3%	0%
Public authority	74%	15%	8%	3%	0%
Non-governmental organisation	65%	26%	5%	5%	0%
Other	56%	27%	10%	3%	4%
All stakeholders	51%	30%	13%	5%	1%

Table 8: Respondent rating on implementation aspect 2. Measurement and impact by goals and milestones

While recognising the importance of performance measurement, stakeholder comments also convey the need to ensure R&I mission implementation does not get buried in bureaucratic requirements. The necessity of **more reciprocal trust** relationship between the funding authority and research performers is highlighted. In the meantime, some stakeholders call for more **reflexivity in the whole evaluation process** underlining that the real issue is not whether the goals are meaningful, but rather who and how judges about the success and transparency of R&I mission implementation.

Another strand of stakeholder comments underlines the need for appropriate performance measurement indicators to track progress as the performance of missions cannot be expressed simply in terms of success or failure. The necessity to develop **new indicators and qualitative assessment** relevant for scoping societal and cultural impact is noted. Stakeholders also stress that most important impacts from research generally materialise in long-term and, in most cases, these are simply not measurable in quantitative terms. Missions should offer a long-term funding perspective (10-20 years) because the societal relevance comprises more than one generation.

Stakeholders also express a widely shared opinion that R&I missions should **engage a diverse set of national and regional stakeholders (aspect 1)**. Around 76% of all responses note this is important or very important. From all stakeholder groups (see Table 9) business and industry appears to be slightly less convinced about the high importance of this criterion (more mark it as 'rather important' than as 'very important'), while it is very significant for the majority of public authorities (57% rank it as 'very important').

Stakeholder	Very important	Rather important	Rather not important	Not important	Don't know
University	41%	32%	19%	6%	2%
Research organisation	45%	32%	19%	2%	2%
Business or industry	34%	41%	18%	6%	1%
Public authority	57%	26%	13%	2%	2%
Non-governmental organisation	49%	28%	13%	4%	4%
Other	49%	32%	8%	5%	7%
All stakeholders	43%	33%	17%	5%	2%

Table 9: Respondent rating on implementation aspect 1. Engagement of diverse set of national and regional stakeholders

Respondents recognise that the engagement of a diverse set of stakeholders is very important and allows to **include the richness of various national and regional experiences** and expertise in the joint effort towards mission goals. This inclusion is crucial for **securing policy alignment**. It is suggested that missions could be preceded by concrete actions (e.g. pilot projects) that ensure the buy-in of regional and local leadership securing additional leverage towards the ambitious objectives.

Stakeholder comments also indicate that the prime concern is to ensure that **participation is open to newcomers** and missions do not become closed clubs of

'usual suspects'. Involving a diverse set of national and regional stakeholders is **crucial to securing wide public support**. Thus, it must be ensured that the 'stakeholders' do not translate into 'industrial [or other] groupings', but equally includes all parts of society.

Another set of stakeholder concerns relate to the fact that any **socially relevant mission is bound to raise political controversy**. National and regional stakeholders may have competing agendas that increase decision-making complexity and slows down the process of finding concrete solutions to the needs of the largest constituency of society. Currently it is not clear how the provided criteria are dealing with the inherent politics of R&I missions. Given this dilemma, it is suggested that the intensity of the engagement of different stakeholders should be driven by competencies and the specific purpose of each mission. It is **important to ensure that the best talents find their way to contribute the missions**.

A proposition that R&I missions should be implemented through **a portfolio of instruments to foster bottom up solutions (aspect 3)** also gains widely-shared acceptance among survey respondents; 75% mark it as important or very important. Public authorities award higher relevance to this criterion than other stakeholder groups with 91% considering this aspect as relevant or very relevant (see Table 10). A number of stakeholder found this aspect hard to rank, notably other organisations (9%) and universities (6%).

Stakeholder	Very important	Rather important	Rather not important	Not important	Don't know
University	38%	33%	18%	5%	6%
Research organisation	40%	36%	18%	3%	4%
Business or industry	43%	35%	18%	3%	1%
Public authority	44%	47%	10%	0%	0%
Non-governmental organisation	42%	36%	17%	2%	3%
Other	42%	31%	16%	2%	9%
All stakeholders	40%	35%	17%	3%	5%

Table 10: Respondent rating on implementation aspect 3. A portfolio of instruments to foster bottom up solutions

In their comments and position papers stakeholders underline that mission governance should strive for **an effective orchestration of related projects** so that the whole can become more than the sum of its parts. One responding university notes: *"Selecting the portfolio of projects to fulfil a specific mission will be just as important as selecting the missions. How to set up an appropriate cluster of projects concretely, still seems to need further specification as this will be the key to success. Questions concerning the sequentiality, interlinkages, and granularity of projects and researchers need to be carefully considered"*. A university network organisation complements this view stating: *"Missions need to be set up in a modular way. (...) At its outset, a modular approach needs to define pathways for collaboration within and between projects"*.

On top of the orchestration of related projects, stakeholder express opinions that missions should also serve as **drivers for organising European R&I landscape**. The introduction of additional forms of partnerships should be avoided. For example, a pan-European network of regions expresses a strong support for *"the alignment of missions to key national and regional priorities, especially smart specialisation strategies, to avoid duplication of effort, and ensure complementarity as well as the impact of research and innovation funding at all levels"*. *"One of the main objectives of the missions should be to eliminate silos. There is a need to create further coordination, coherence and synergies between the existing instruments (PPPs, FET flagships, etc.), structures and measures"*, the organisation concludes. Other contributors are merely expressing their recognition that designing a system where the achievement of overall impact can be maximised through separate projects whilst fostering an optimal amount of coherence is very challenging and the learning experience from instruments like EIT KICs are exemplifying the profound difficulties involved in this process.

5 Citizen consultation

A more noticeable split in stakeholder opinions concerns the question whether **citizens should be consulted on the choice of R&I missions**. Around 69% of all respondents agree or strongly agree to this statement, while 28% have an opposite view. Relative data per stakeholder group shows that universities and research organisations have the most diverging views (see Table 11). While roughly two thirds of these stakeholders (more than 60%) agree to the statement, one third (some 35%) mark their disagreement to this idea. Public authorities and non-governmental organisations express the most favourable stance on the inclusion of citizens in the choice of R&I missions with more than 90% agreeing or strongly agreeing to this statement.

Stakeholder	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
University	15%	46%	30%	7%	2%
Research organisation	21%	44%	26%	6%	4%
Business or industry	15%	62%	17%	4%	2%
Public authority	40%	52%	2%	2%	5%
Non-governmental organisation	43%	46%	7%	0%	3%
Other	25%	54%	13%	3%	5%
All stakeholders	20%	49%	23%	5%	3%

Table 11: Respondent rating on their agreement if citizens should be consulted on the choice of R&I missions

The rationale of stakeholder reasoning on this topic oscillates between a clear-cut rejection of citizen consultation on the grounds that the **general public is not equipped to make informed decisions** on complex matters relevant to setting the EU R&I agenda, and some fundamental research activities are simply out of public awareness, understanding and primary interest. Others reject public engagement warning about the dangers that **public opinion may be easily manipulated** by organised interest groups and strong lobbies. Some stakeholders underline that this idea while good in theory is **too complex and costly to implement** in practice reminding that a proper citizen consultation requires setting a representative sample of respondents and it is very hard to determine representativeness that reflects society in general.

Those who view citizen consultation more favourably recognise that public views are important to **guide and elaborate the discussion on main societal challenges, ensure a wide-spread societal acceptance** of R&I missions, **provide political legitimacy** and also **mobilise further resources and interests** to the selected R&I directions. These stakeholders emphasise that the term 'consult' should entail public deliberation on the possible future options, but not a final say on the selection of missions.

Other contributors stress that the issue is not whether citizens should be consulted, but how they should be consulted. Stakeholders call for **finding meaningful ways to engage citizens**. For example, a research and consultancy firm elaborates that *"the views of stakeholders and diverse set of citizens might be best integrated in early exploratory phases (e.g. via foresight) rather than in the later phases of the policy cycle when the mission has been largely defined and the consultation may merely seek for 'approval'. One way for developing citizen insight on issues is the **use of living labs and new methods of user-centred design for feedback**".*

The experience of setting the Dutch National Research Agenda is provided as a good example how citizen input can be meaningfully sourced and accounted for providing a **rigorous selection process of participants** that is coordinated in a transparent way by (scientific) experts. Also, Irish experience of using a public forum where citizens can ask questions to experts for evaluating complex issues in order to recommend and advance legislative choices is referenced. It is noted that this exercise has had a radical and very useful effect on the planning of legislation. A non-governmental organisation

proposes the set-up of **new mechanisms like Citizens Conventions and Civil Society High Level Group** to integrate public views in the entire process of R&I strategy design. The **application of novel information and communication technologies** is noted as a useful avenue to structure these broad and open engagement processes.

A smaller set of stakeholders emphasise that the European approach should go beyond citizen consultation on the choice of R&I missions and strive to **integrate better public concerns in research and innovation processes**. Examples are provided that patient and care provider input is critical in the implementation of healthcare missions. A university network organisation recommends that *“the missions framework adopts a flexible bottom-up approach to citizens engagement, where researchers and innovators can design ways for engaging with citizens that best suit the nature of their project”*.

6 Mission proposals

Mission proposals were submitted in two ways: 1) through an online survey of the call for feedback; 2) through stakeholder position papers uploaded to the call for feedback or sent directly to the European Commission. Survey data and position paper information had a difference in granularity. Therefore, these two data sources have been analysed separately, using qualitative analysis software Atlas.ti and MS Excel functionalities.

All concrete and targeted mission proposals, as well as proposals for more broader mission areas put forward in the stakeholder position papers were coded according to the five Horizon Europe Clusters and the respective 37 Intervention areas (see Table 13 column 1 and 2). Mission proposals from the position papers were also coded in accordance with the corresponding SDGs (see Table 12Table 12:). Each mission proposal could be allocated to multiple Horizon Europe Intervention areas and more than one SDG.

A more aggregated coding scheme was applied to the mission proposals submitted through the online survey. Due to the fact that the proposal length was limited to 500 characters, a large part of the mission proposals from survey contained too little information or were too uncertain to be allocated under specific Horizon Europe Intervention areas and hence could not be coded with the same level of granularity as proposals from the position papers. For this reason, closely related Intervention areas were combined into 20 Intervention area groupings as shown in the third column of Table 13.

SDG No	SDG Title
SDG 1	No Poverty
SDG 2	Zero Hunger
SDG 3	Good Health and Well-Being for People
SDG 4	Quality Education
SDG 5	Gender equality
SDG 6	Clean Water and Sanitation
SDG 7	Affordable and Clean Energy
SDG 8	Decent Work and Economic Growth
SDG 9	Industry, Innovation and Infrastructure
SDG 10	Reducing Inequalities
SDG 11	Sustainable Cities and Communities
SDG 12	Responsible Consumption and Production
SDG 13	Climate Action
SDG 14	Life Below Water
SDG 15	Life on Land
SDG 16	Peace, Justice and Strong Institutions
SDG 17	Partnerships for the Goals

Table 12: United Nations Sustainable Development Goals

Horizon Europe Clusters	Horizon Europe Intervention areas	Intervention area groupings used for analysis of survey data
1. HEALTH	1.1 Health throughout the life course	Health and wellbeing
	1.2 Environmental and social health determinants	
	1.3 Non-communicable and rare diseases	Diseases
	1.4 Infectious diseases	
	1.5 Tools, technologies and digital solutions for health	Healthcare
	1.6 Health care systems	
2. INCLUSIVE AND SECURE SOCIETY	2.1 Democracy	Democracy
	2.2 Cultural heritage	Cultural heritage
	2.3 Social and economic transformations	Social and economic transformations
	2.4 Disaster-resilient societies	Security
	2.5 Protection and security	
	2.6 Cybersecurity	
3. DIGITAL AND INDUSTRY	3.1 Manufacturing technologies	Industry and manufacturing
	3.3 Advanced materials	
	3.4 Artificial intelligence and robotics	Artificial intelligence and robotics
	3.2 Digital technologies	Digitalisation
	3.5 Next generation internet	
	3.6 High performance computing and Big Data	
	3.7 Circular industries	Sustainable production
	3.8 Low carbon and clean industry	
	3.9 Space	Space
4. CLIMATE, ENERGY AND MOBILITY	4.1 Climate science and solutions	Climate science and solutions
	4.2 Energy supply	Energy production and consumption
	4.3 Energy systems and grids	
	4.4 Buildings and industrial facilities in energy transition	
	4.9 Energy storage	Communities and cities
	4.5 Communities and cities	
	4.6 Industrial competitiveness in transport	
	4.7 Clean transport and mobility	Transport and mobility
	4.8 Smart mobility	
5. FOOD AND NATURAL RESOURCES	5.1 Environmental observation	Biodiversity and natural capital
	5.2 Biodiversity and natural capital	
	5.3 Agriculture, forestry and rural areas	Food and agriculture
	5.5 Food systems	
	5.4 Sea and oceans	Sea and oceans
	5.6 Bio-based innovation systems	Bioeconomy
	5.7 Circular systems	

Table 13: Horizon Europe Clusters, Intervention areas and the Intervention area groupings used for survey analysis

6.1 Synthesis of all proposed mission areas

A combined view on the frequency of the proposed mission areas from survey responses and stakeholder position papers is summarised in Figure 5. It must be highlighted that the most frequently cited mission proposal areas cover all five Horizon Europe Clusters. In total, **Digital and industry is the most widely cited cluster, 27% of all stakeholder contributions have been connected to this theme. Health is featured in 22% of all mission proposals, while Climate, energy and mobility, Food and natural resources and Inclusive and secure society respectively account for 19%, 16% and 16% of all contributions.**

The top three most widely proposed areas for the future R&I missions are Digitalisation (13%), Health and wellbeing (10%) and Social and economic transformation (10%). The other areas are represented in a rather balanced way: seven areas have been cited in 5%-7% of all stakeholder contributions and another six areas in 3%-4% of all mission proposals.



Figure 5: Frequency of the proposed mission areas in survey responses and stakeholder position papers

As already outlined before, each mission proposal could be allocated to more than one Horizon Europe Intervention area grouping. In order to understand better the underlying pattern how the proposed missions cut across various Horizon Europe Clusters and Intervention area groupings, a code co-occurrence analysis was performed. The circle

graph in Figure 6 summarises this information in a graphic way. The width of the connecting line represents the frequency of co-occurrence between two codes. In other words, the wider the connecting line, the more prominent is the link between the two Intervention area groupings in all mission proposals. Red lines represent the connectivity of Health cluster; violet lines correspond to Inclusive and secure society; blue lines belong to Digital and industry cluster; orange lines feature Climate, energy and mobility cluster; and green lines reflect the connectivity of Food and natural resources cluster.

The circle graph shows that **all five Horizon Europe Clusters are well interconnected with each other** in the stakeholder mission proposals. Prominent cross-links for each cluster are:

- Sustainable production (cluster 3) - Bioeconomy (cluster 5)
- Sustainable production (cluster 3) - Biodiversity and natural capital (cluster 5)
- Sustainable production (cluster 3) – Energy production and consumption (cluster 4)
- Security (cluster 2) - Digitalisation (cluster 3)
- Social and economic transformations (cluster 2) – Digitalisation (cluster 3)
- Climate science and solutions (cluster 4) – Biodiversity and natural capital (cluster 5)
- Climate science and solutions (cluster 4) – Food and agriculture (cluster 5)
- Health and wellbeing (cluster 1) – Social and economic transformations (cluster 2)
- Health and wellbeing (cluster 1) – Food and agriculture (cluster 5)
- Health and wellbeing (cluster 1) – Digitalisation (cluster 3).

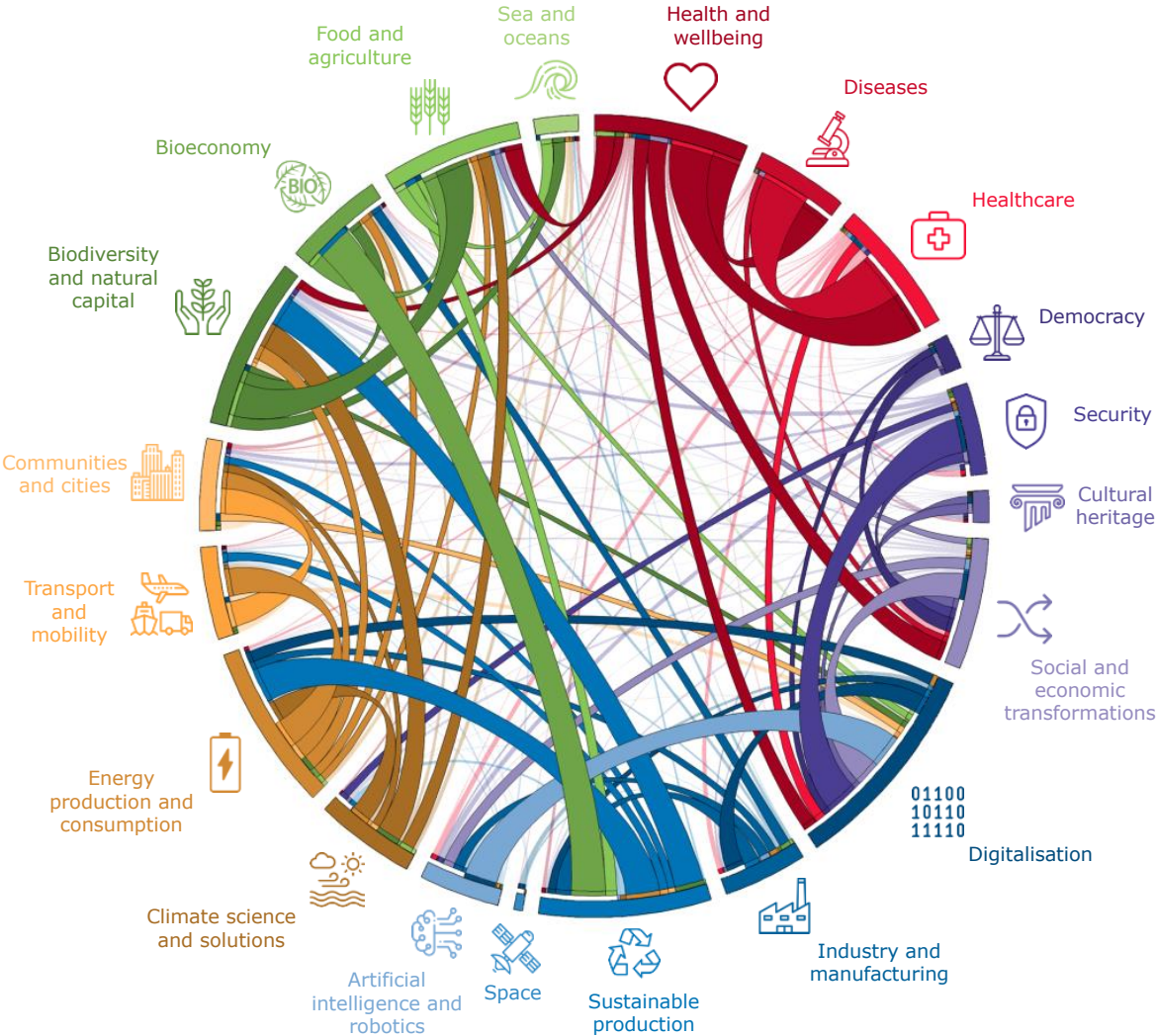


Figure 6: Cross-links between Horizon Europe Clusters and Intervention area groupings in all stakeholder contributions

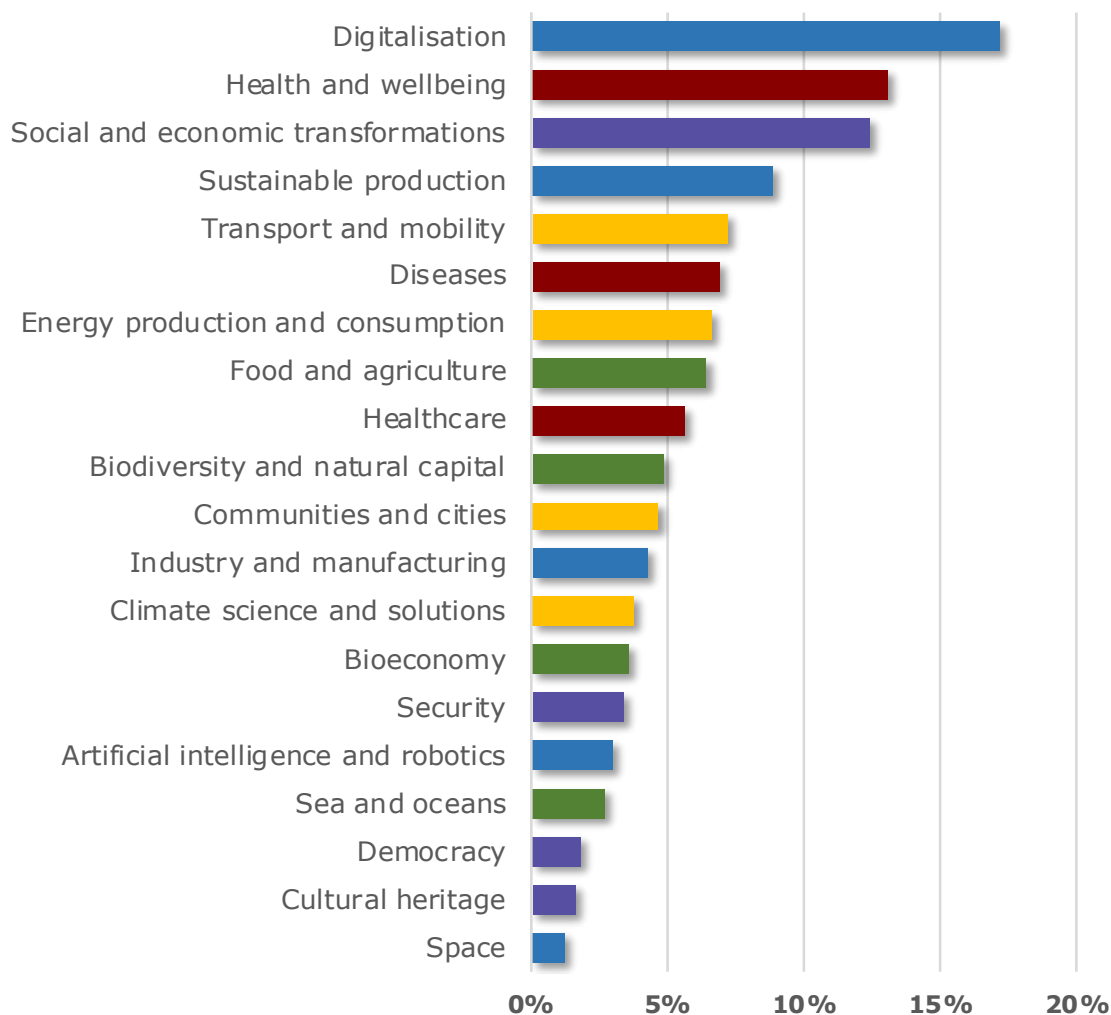


Figure 8: Themes in the mission proposals from survey respondents

Stakeholder group	No of respondents	HEALTH	INCLUSIVE AND SECURE SOCIETY	DIGITAL AND INDUSTRY	CLIMATE, ENERGY AND MOBILITY	FOOD AND NATURAL RESOURCES	Total
University	554	22%	20%	27%	15%	15%	100%
Research organisation	327	22%	10%	30%	19%	20%	100%
Business or industry	181	12%	13%	33%	26%	16%	100%
Public authority	78	22%	11%	27%	26%	14%	100%
Non-governmental organisation	82	40%	19%	12%	15%	14%	100%
Other	129	23%	22%	25%	16%	14%	100%

Table 14: Relative emphasis of Horizon Europe Clusters in mission proposals from all stakeholder groups

The overall frequency of codes for all mission proposals from stakeholder position papers is reflected in Figure 10 and Figure 11. In the Health Cluster, the intervention area on Tools, technologies and digital solutions for health is the most reoccurring theme in stakeholder position papers (17% of all proposals reflect this topic). Also Digital technologies and Social and economic transformation are frequently mentioned themes in the mission proposals (15% each). Intervention areas from all five Horizon Europe Clusters are represented among the most frequently proposed themes. One can note that, with the exception of Social and economic transformations, overall stakeholders have placed a relatively less emphasis on the Intervention areas from the Inclusive and secure society Cluster.

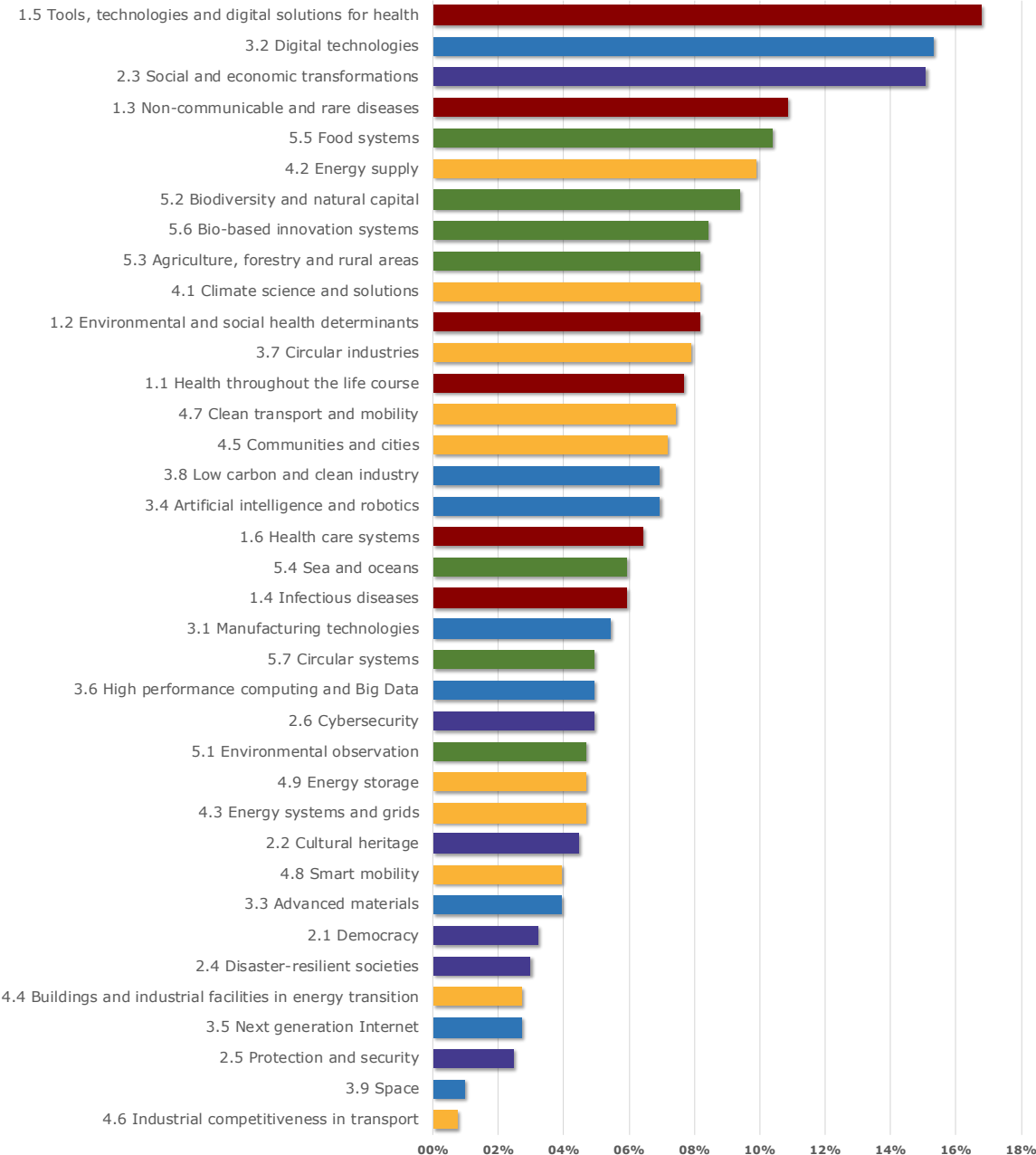


Figure 10: Code frequency per Horizon Europe Intervention areas in mission proposals from position papers

Mapping the mission proposals against the corresponding SDGs, it is clear that a large share of European stakeholders' proposals (48%) include SDG 9: Industry, innovation and infrastructure. It is a very comprehensive SDG that cuts across a wide range of Horizon Europe Intervention areas. Also SDG 3: Good health and well-being for people is widely represented in mission proposals (29%). SDG 12: Responsible consumption and production and SDG 11: Sustainable cities and communities are featured in respectively 17% and 13% of mission proposals in stakeholder position papers.

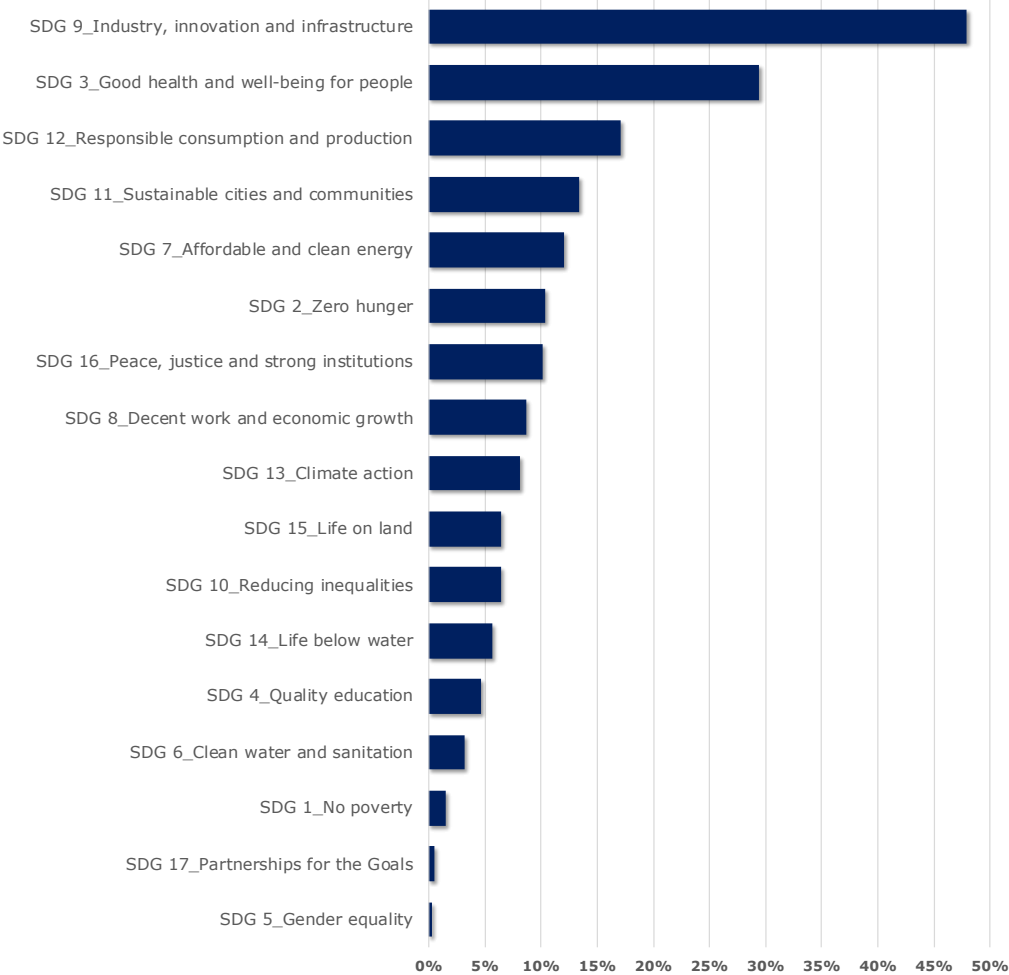


Figure 11: Code frequency per Horizon Europe Intervention areas in mission proposals from position papers

Figure 12 depicts the co-occurrence of SDG codes in stakeholder position papers. The most prominent cross-links are:

- SDG 9: Industry, innovation and infrastructure and SDG 3: Good health and wellbeing for people
- SDG 9: Industry, innovation and infrastructure and SDG 7: Affordable and clean energy
- SDG 9: Industry, innovation and infrastructure and SDG 11: Sustainable cities and communities
- SDG 9: Industry, innovation and infrastructure and SDG 12 Responsible consumption and production
- SDG 9: Industry, innovation and infrastructure and SDG 16: Peace, justice and strong institutions
- SDG 12: Responsible consumption and production and SDG 7: Affordable and clean energy
- SDG 12: Responsible consumption and production and SDG 2: Zero hunger
- SDG 2: Zero hunger and SDG 3: Good health and wellbeing for people.

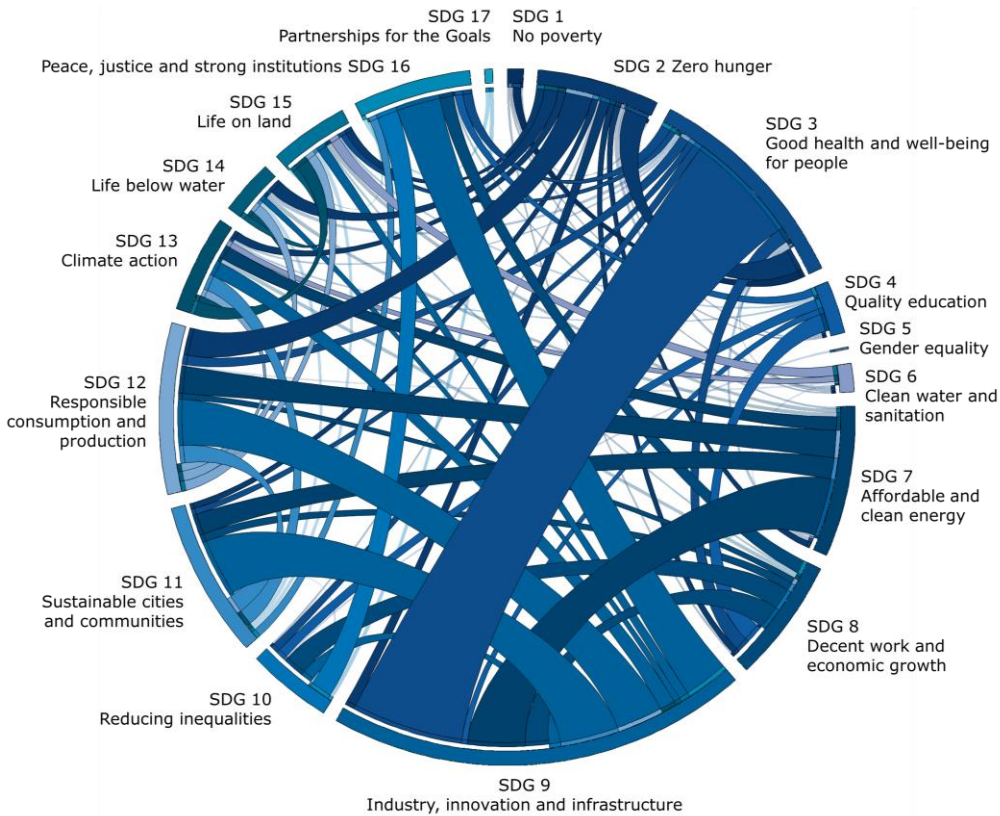


Figure 12: SDG code co-occurrence in mission proposals from stakeholder position papers

6.4 Concrete mission proposals

The mission proposals in Table 15 were submitted by stakeholders, and aim to illustrate the range and potential of cross-cutting nature across Horizon Europe Clusters and Intervention areas as well as the potential in clearly focused and targeted definition of the mission. These mission proposals do not prejudge the level of granularity or nature of mission areas that the Commission will select. For a full overview of all mission proposals from stakeholder position papers, refer to Annex 3. For an extended list of selected mission proposals from the survey, refer to Annex 2.

Mission proposal	Associated Intervention areas
Increasing economic and social participation of people with chronic diseases — reducing disability by 20% and extending average healthy life by 2 years in the next decade.	<ul style="list-style-type: none"> ● 1.1 Health throughout the life course ● 1.3 Non-communicable and rare diseases ● 2.3 Social and economic transformations
100% evidence-based parent and child care before, during and after pregnancy by 2030.	<ul style="list-style-type: none"> ● 1.2 Environmental and social health determinants ● 1.5 Tools, technologies and digital solutions for health ● 1.6 Health care systems
Building a synthetic cell: <ul style="list-style-type: none"> - Short-term (<5 years): synthetic modules capable of metabolism, energy conversion, growth and division - Medium-term (5-10 years): integration of functional modules towards autonomously replicating cells - Long-term (10-20 years): passing from the simplest form of cellular life towards human cell models, and tissues. 	<ul style="list-style-type: none"> ● 1.5 Tools, technologies and digital solutions for health ● 3.3 Advanced materials ● 4.2 Energy supply ● 5.5 Food systems
Before 2030, 1000 cities in Europe will offer life contexts in a virtual city, including participation in science, culture and the arts and using interactive and mobile technologies	<ul style="list-style-type: none"> ● 2.2 Cultural heritage ● 3.2 Digital technologies ● 4.5 Communities and cities
100 Gbits of information accessible to 90% of the European population in a sustainable way.	<ul style="list-style-type: none"> ● 2.3 Social and economic transformations ● 3.2 Digital technologies
Open inclusive and safe digital society: <ul style="list-style-type: none"> - European Digital Space by 2030 - High quality e-services for EU citizens - By 2030, public digital services are better and more secure than private digital services 	<ul style="list-style-type: none"> ● 1.5 Tools, technologies and digital solutions for health ● 2.6 Cybersecurity ● 3.2 Digital technologies ● 3.4 Artificial intelligence and robotics ● 3.6 High performance computing and Big Data ● 4.2 Energy supply ● 4.5 Communities and cities ● 4.7 Clean transport and mobility
Zero-waste cities or advanced waste handling processes for 50% reduction of landfill waste in all European large cities during the next decade.	<ul style="list-style-type: none"> ● 3.4 Artificial intelligence and robotics ● 3.7 Circular industries ● 5.7 Circular systems
Free the environment of nano- and microplastics by 2035.	<ul style="list-style-type: none"> ● 3.7 Circular industries ● 5.6 Bio-based innovation systems
Reaching self-sufficiency for innovation critical raw materials by 2050.	<ul style="list-style-type: none"> ● 3.7 Circular industries ● 5.2 Biodiversity and natural capital
50 major cities in the EU have implemented food policies leading to 50% reduction of citizen's food print in 2030.	<ul style="list-style-type: none"> ● 4.5 Communities and cities ● 5.5 Food systems
Reduce the carbon footprint for the mobility of people and goods by 30% by 2030 in EU28.	<ul style="list-style-type: none"> ● 4.1 Climate science and solutions ● 4.2 Energy supply ● 4.7 Clean transport and mobility ● 5.6 Bio-based innovation systems

The ocean is providing 30% of sustainable energy by 2030.	<ul style="list-style-type: none"> ● 4.2 Energy supply ● 5.4 Sea and oceans
To create new sustainable circular economy business and operating models and cut raw material consumption by 30% by 2030.	<ul style="list-style-type: none"> ● 3.7 Circular industries ● 5.2 Biodiversity and natural capital
Before 2030, introduction of information systems on air quality (including crowdsourcing involvement) and the impact on the health of the residents in every municipality with a population of over 100,000, together with the implementation of countermeasures (e.g. urban planning, transport management, decisions on free public transport).	<ul style="list-style-type: none"> ● 1.2 Environmental and social health determinants ● 3.2 Digital technologies ● 4.5 Communities and cities ● 4.7 Clean transport and mobility
50% less casualties, damage and global disruption from extreme weather events in 2040.	<ul style="list-style-type: none"> ● 2.4 Disaster-resilient societies ● 4.1 Climate science and solutions ● 5.1 Environmental observation
By 2030 75% of all Europeans will choose healthy and sustainable diets, provided through climate-smart, resource efficient, circular production generating 50% less waste and using 40% less resources.	<ul style="list-style-type: none"> ● 1.2 Environmental and social health determinants ● 5.3 Agriculture, forestry and rural areas ● 5.5 Food systems ● 5.7 Circular systems
Smart, Green and Integrated Transport: Zero-Emission Transport Industry by 2035.	<ul style="list-style-type: none"> ● 4.7 Clean transport and mobility ● 4.8 Smart mobility ● 5.7 Circular systems
Sustainable food systems by 2030. Goals: pesticide-free agriculture, stop biodiversity loss, 50% farmland following organic principles, 100% animal welfare, 100% sustainable diets. Implementation: interdisciplinary R&I on farms and in food sector based on strong relations among food system actors. Design diversified farming systems through improved use of natural resources, better integrate land, food and farming policy, set up transparent supply chains, promote sustainable consumption/diets.	<ul style="list-style-type: none"> ● Biodiversity and natural capital ● Food and agriculture ● Sustainable production
Pre-symptomatic diagnosis of >50% of major human diseases (cancer, neurodegenerative diseases, inflammation and auto-immune diseases) and groundwork laid for preventive medicines by 2030.	<ul style="list-style-type: none"> ● Diseases ● Healthcare
All EU cities as sustainable ecosystems by 2030: - 30% of transport infrastructure become sustainable suppliers by energy production, allowing for large fleet of electric vehicles; - 50% of urban daily mobility done with 0 emission through implementation of affordable services in urban areas; - 50% of goods delivery in urban areas is done with zero emissions; - Low carbon construction technologies including low carbon concrete; - Modern clean and secure dry toilet systems as standard in cities.	<ul style="list-style-type: none"> ● Transport and mobility ● Communities and cities
Reducing the burden of cancer by 30% across Europe by 2030: Despite great advances in science, technology and healthcare, cancer remains an enormous societal burden. We can tackle cancer head-on with a multi-pronged approach comprising prevention, early detection and personalised medicine in a transparent regulatory and healthcare environment that rewards therapeutic success for the individual patient. Place the citizen and patient at centre stage for better outcomes.	<ul style="list-style-type: none"> ● Diseases

<p>Sea as new space: sustainable use of the resources offered by the seas: sustainable fishery, plastic free ocean (90% reduction of plastic waste), utilisation of cutting-edge technology in order to improve the safety and sustainability in maritime operations: 0 accidents by 2030, autonomous ships (X amount of autonomous ships tested/ cutting edge technological new solutions by 2030?), emission free logistics (x% efficiency increase).</p>	<ul style="list-style-type: none"> ● Sea and oceans
<p>Securing natural resources for Europe Resource Efficiency with respect to raw materials, food and water needs to be increased by a factor of 4 to 10 to meet the demands by 2050 for raw materials, water and food. -Increase the share of secondary and renewable materials in mass produced, high -value products by 30% - Minimising environmental impact of food production while increasing efficiency - minimizing organic waste by 50% ensuring high water quality for all and at any time</p>	<ul style="list-style-type: none"> ● Biodiversity and natural capital ● Sustainable production
<p>By 2030, build a universal quantum computer and place it on the cloud. Bold: construct the most powerful computing devices physics tells us can be built & use it to accelerate discovery of drugs and new materials; Time-bound: measurable by metrics like qubit number and quality; Ambitious but realistic R&I actions set out in a technology road-map covering multiple solutions; Cross-disciplinary: engineers, computer scientists & quantum physicists working together with end-users across many sectors</p>	<ul style="list-style-type: none"> ● Digitalisation
<p>By 2030 75% of all Europeans will choose healthy and sustainable diets, provided through climate-smart, resource efficient, circular production systems generating 50% less waste and using 40% less resources. Building on Europe's great diversity and richness in food culture and production, citizens, producers and processors will be engaged to transform the food system to make it sustainable and to empower EU citizens to attain safe, affordable, healthy and sustainable diets</p>	<ul style="list-style-type: none"> ● Sustainable production ● Health and wellbeing
<p>Health-map Europe: Establish integrated data capture, analysis and visualization systems that enable prevention, interception and early treatment of diseases, which account for 80% of healthcare costs. Impact: reduce the burden of chronic diseases by 30% (aligned with SDG 3), enable learning healthcare systems to provide the right intervention for the right person at the right time and right place.</p>	<ul style="list-style-type: none"> ● Diseases ● Healthcare ● Digitalisation
<p>A carbon-neutral Europe (green mobility, batteries, fuel cells, renewable fuels, bioenergy, electric & hybrid powertrains...) available, convenient, personalized, digitized, energy efficient and seamless (intelligent transport systems, autonomous vehicles, block chain, integrated banking system etc.). e.g: - Reduction of air pollution by fine particles in European cities and industrial sites: no AQI (air quality index) above 100 after 2030. - 30% of fuels from biofuel by 2030.</p>	<ul style="list-style-type: none"> ● Transport and mobility ● Energy production and consumption ● Bioeconomy
<p>CLEAN SOIL – contaminated sites affects a high number of citizens. The mission should decrease the number of currently >300k contaminated sites in the EU by 50% to ensure economic exploitation and environmental protection+improve soil assessment for better land use alternatives til 2030. This needs efforts/innovations from a variety of disciplines (e.g.chemistry, geodesy, ecologists) and includes various actors (e.g. NGOs, biotech industry). Grand challenge: Sustainability/health/food security.</p>	<ul style="list-style-type: none"> ● Biodiversity and natural capital

Table 15: Examples of concrete and targeted mission proposals from stakeholder position papers and survey

ANNEXES

1 Annex 1: Methodological Note

For the quantitative analysis of closed questions and generation of data overviews, MS Excel and CIRCOS data visualisation software was used. In order to improve the accuracy of analysis, data cleaning was performed.

Data cleaning

Correction of incomplete, inaccurate or inconsistent data: Some closed-ended questions did not have responses to one or more closed-ended questions. Regardless, these respondents were included in the data analysis and the absolute sample size, as well as the percentage of the of total responses for each closed-ended question frequency analysis is shown.

Where possible, missing stakeholder type of the responded was added and/or corrected according to the publicly available information about the respondent's organisation. In total, 33 data points were added and/or corrected.

In addition, survey proposals that could not be defined as mission proposals or those that were too general to be coded under a specific mission theme were excluded from the analysis (e.g. opinions on how a mission should be selected, who should be involved, scale of the missions etc.). In total, 288 answers out of 2459 were excluded.

Duplications in the dataset: The dataset was screened for duplications by comparing responses of the same organisations showing different respondent name, while also reporting identical responses to survey questions. Regardless, all responses were maintained in analysis. Total respondent sample size (n=1190).

Proposal campaign detection

The dataset was screened for the presence of identical or very similar responses to open-ended questions (mission proposals) using approximate string matching text comparison algorithm (also known as fuzzy matching) - technique of finding similar text that match a pattern approximately, rather than exactly. This allows to detect not just identical, but also very similar answers comparing similarity of text string expressed as a percentage. Similar answers with changed and/or replaced words, slightly changed word order, as well as with just identical paragraph parts were detected.

Due to the fact that identical answers did not form a large share of the overall data, all responses from unique respondents were maintained in the analysis. In total, 2074 unique mission proposals out of 2171 were identified. Table 1 shows the number of campaigns according to the volume of identical and/or similar mission proposals.

Number of similar and/or identical answers	Number of campaigns
2	96
3	18
4	11
5	6
6	5
7	3
8	1
9	2
10	0
11	1
12	1
13	0
14	1
15	0
16	0
17	1

Table 1: Number of campaigns in the survey

Intervention area grouping

Due to the fact that the survey limited stakeholder proposal length to 500 characters, a large share part of mission proposals contained too little information or were too uncertain to be selected under specific Horizon Europe Intervention areas. Therefore, similar Intervention areas were combined into smaller Intervention area groups as shown in Table 2. In total, 37 Intervention areas were grouped into 20 Intervention area groupings that were used for the coding of survey proposals. Similar grouping logic was used to quantitatively compare and analyse survey and position paper code co-occurrence.

1. HEALTH		2. INCLUSIVE AND SECURE SOCIETY		3. DIGITAL AND INDUSTRY		4. CLIMATE, ENERGY AND MOBILITY		5. FOOD AND NATURAL RESOURCES	
Mission theme	Corresponding intervention area	Mission theme	Corresponding intervention area	Mission theme	Intervention area	Mission theme	Corresponding intervention area	Mission theme	Corresponding intervention area
Health and wellbeing	Health throughout the life course	Democracy	Democracy	Industry and manufacturing	Manufacturing technologies	Climate science and solutions	Climate science and solutions	Biodiversity and natural capital	Environmental observation
	Environmental and social health determinants	Cultural heritage	Cultural heritage		Advanced materials		Energy supply		Biodiversity and natural capital
Diseases	Non-communicable and rare diseases	Social and economic transformations	Social and economic transformations	Artificial intelligence and robotics	Artificial intelligence and robotics	Energy production and consumption	Energy systems and grids	Food and agriculture	Agriculture, forestry and rural areas
	Infectious diseases		Disaster-resilient societies		Key digital technologies		Buildings and industrial facilities in energy transition		Food systems
Healthcare	Tools, technologies and digital solutions for health and care	Security	Protection and Security	Digitalisation	Next generation internet	Communities and cities	Energy storage	Bioeconomy	Bio-based innovation systems
	Health care systems		Cybersecurity		Sustainable production		Circular industries		Transport and mobility
				Low carbon and clean industries		Clean transport and mobility			
	Space		Space	Smart mobility					

Table 2: Grouping of Horizon Europe Intervention areas for survey analysis

Proposal coding

Survey proposals. In order to detect and analyse the most frequently discussed topics in stakeholder mission proposals from the survey, each proposal was manually read and coded with up to three different codes according to a previously described coding scheme (see Table 2).

The unit of analysis in the frequency analysis is a single coded mission proposal. A total of 2171 mission proposals were coded with 20 distinct codes. These codes were applied a total of 2602 times. On average, each mission proposal from survey was coded with 1.2 mission theme codes.

Position paper proposals. In order to detect and analyse the most frequently discussed topics in stakeholder position papers, a qualitative research software Atlas.ti was used. The position papers were screened and uploaded on the software, merging all contribution from one stakeholder into one file. All documents were sorted in six main stakeholder groups (university, research organisation, business or industry, public authority, non-governmental organisation, other organisation). Position papers were read and coded according to an agreed coding scheme of 37 Horizon Europe Intervention areas (see Table 2 for details). In addition, stakeholder positions on the mission selection criteria, their implementation modalities and citizen engagement were also marked with additional three codes. This information was analysed together with survey respondent comments.

The unit of analysis in the frequency analysis is a coded quotation – a single mission proposal. A total of 405 mission proposals were coded with 54 distinct codes (37 thematic intervention themes and 17 SDGs). These codes were applied a total of 1745 times. On average, each mission proposal was coded with 2.4 intervention area codes and 1.85 SDG codes.

Data analysis

Closed-ended questions. In order to analyse the findings of the survey, frequency analysis of the closed-ended questions was conducted using MS Excel. For each closed-ended question, a two-way frequency table with measures of association was generated.

Open-ended questions. Open-ended questions were analysed using two metrics:

1. Code re-occurrence frequency by code and by stakeholder
2. Code co-occurrence frequency by code.

Synthesis of qualitative information. Using quantitative information on code re-occurrence and co-occurrence, further contextual analysis of position paper information and stakeholder comments was performed.

2 Annex 2: Extended list of selected mission proposals from survey

Due to the fact that the survey limited the length of stakeholder contributions to 500 characters, the majority of them were too general and/or uncertain to be defined as concrete mission proposals. To provide a general overview, representative mission proposals from survey were selected based on one or more of the following criteria:

1. Mission proposals contain specific quantifiable goals to be reached in defined timeframe (e.g. "Increase by 10% the production of marine food and feed by 2030");
2. Mission proposals represent roughly the number of times a certain theme has been proposed by stakeholders;
3. Mission proposals represent the most popular keywords from the word cloud;
4. Mission proposals aim to illustrate their cross-cutting nature across Intervention area groupings.

#	Proposed mission	Code 1	Code 2	Code 3
1	"Flightpath 2050" sets a vision and clear emissions reduction targets for the Aviation sector, such as 75% reduction in CO2 by 2050. This mission covers industrial competitiveness, societal needs, environmental protection, safety, security, education and skills. It should continue to be supported by the European Union as proposed in the updated ACARE SRIA. This mission is bold, achievable, cross-sector and will have direct & tangible benefits to society. See: ACARE SRIA Agenda, 2017 Update, Vol 1.	Transport and mobility		
2	"Increase by 10% the production of marine food and feed by 2030" As world's population projects to reach 9,8 billion by 2050, a shift in the paradigm of feeding is needed to increase the ocean's role, from today's 2%, as source of responsible, healthy and sustainable food. This will require basic research and technological development as well as the involvement of consumers, the private and public sectors to promote innovative solutions to boost fisheries and mariculture in a sustainable way.	Biodiversity and natural capital	Food and agriculture	Sea and oceans
3	"REDUCED WASTE GENERATION WITH 80% BY 2030 AND INCREASED WASTE RECOVERY WITH 80% BY 2030" - This mission could include waste prevention methods (e.g. reuse, repair and/or produce products with material that last longer) and by improving & developing methods and processes for	Sustainable production		

#	Proposed mission	Code 1	Code 2	Code 3
	material recycling and refining of waste and residue into energy, new materials, fodder, or food.			
4	<ul style="list-style-type: none"> Increasing physical, mental and social health, so called 'holistic health' of patients needing medical care for chronic (or non-communicable) diseases A 10% increase in composite positive health outcomes of patients with chronic diseases by the year 2030 	Health and wellbeing	Diseases	
5	<p>100 Carbon Neutral Cities by 2030 in Europe</p> <p>Comment: as proposed by Professor Mazzucato.</p> <p>However, consider also the sectors of energy production and energy storage. Including the sustainable use of the subsurface: geothermal energy (RES), underground energy storage and CO2 storage, etc.</p>	Climate science and solutions	Energy production and consumption	Communities and cities
6	30% share of renewable energies in 10 years	Energy production and consumption		
7	<p>50 climate resilient major cities in Europe in 2040.</p> <p>The aim is to research, develop and implement solutions leading to 50 cities which suffer less than 50% casualties, damage and disruptions compared to today a consequence of climate-induced events with a statistical return period in of 1 in 100 years (in 2100). Besides (applied) research and innovation this mission requires a living lab/pilot approach and potentially complementary actions to facilitate implementation of proven solutions.</p>	Climate science and solutions	Communities and cities	
8	<p>A carbon-neutral Europe (green mobility, batteries, fuel cells, renewable fuels, bioenergy, electric & hybrid powertrains...) available, convenient, personalized, digitized, energy efficient and seamless (intelligent transport systems, autonomous vehicles, block chain, integrated banking system etc.).</p> <p>e.g:</p> <ul style="list-style-type: none"> Reduction of air pollution by fine particles in European cities and industrial sites: no AQI (air quality index) above 100 after 2030. 30% of fuels from biofuel by 2030. 	Energy production and consumption	Transport and mobility	Bioeconomy
9	A European quantum web where Quantum computers are connected via quantum networks and exploit data from quantum sensors. Such a network would enable a powerful means for EU citizens to enjoy secure communication and access to computing power for intractable problems we could never	Digitalisation		

#	Proposed mission	Code 1	Code 2	Code 3
	solve otherwise. Applications include, e.g. healthcare, environmental protection, and mobility. The Quantum Flagship is already targeting this goal.			
10	Achieve more sustainable food production by 2030. Reduce the necessary resources by 30%: energy, water consumption, inputs for agriculture and livestock, waste generated throughout the agri-food value chain.	Sustainable production	Food and agriculture	
11	Achievement a 5% (at EU scale) on renewable and dispatchable electricity production. It is clear that decarbonization at energy production is a fact but today most of renewable resources are non-dispatchable (PV, wind) limiting the possible penetration of renewables into the system. The progress in despatchable renewable will provide needed baseload and raise renewable limit up to any possible degree. The achievement of an initial 5% will demonstrate that any limit will also be possible	Energy production and consumption		
12	Achieving disruptive quantum computation capabilities across different platforms (superconducting, electronics, photonic based) in the next 15-20 years. If achieved, it would have major societal impacts. This is partly covered by the current Quantum Flagship, and its ambition should be addressed with even more funding.	Digitalisation		
13	Air pollution and mortality Mission: Decrease air pollution and its impacts on premature deaths in Europe by 30% by 2030. Around 90% of citizens in Europe are exposed to pollutants at concentrations higher than the air quality levels deemed harmful to health. Outdoor air pollution could lead to 6 to 9 million premature deaths by 2060 worldwide.	Health and wellbeing		
14	All EU cities as sustainable ecosystems by 2030: 30% of transport infrastructure become sustainable suppliers by energy production, allowing for large fleet of electric vehicles 50% of urban daily mobility done with 0 emission through implementation of affordable services in urban areas 50% of goods delivery in urban areas is done with zero emission Low carbon construction technologies including low carbon concrete Modern clean and secure dry toilet systems as standard in cities	Transport and mobility	Communities and cities	

#	Proposed mission	Code 1	Code 2	Code 3
15	AMR. The discovery of penicillin by Fleming in 1928 started the antibiotic age and ignited the modern era of drug discovery. Unfortunately, resistant bacteria were detected soon after the first anti-microbials were introduced. We have to invest in innovative smart, antibiotics, personalized medicine, novel diagnostics, alternative therapies, preventive measures. The goal of this mission is to reduce in the next 10 years the more than 30 million extra infections and 1 million extra deaths by 50%.	Diseases		
16	Applied Quantum Science & Technology, with emphasis on the transition of knowledge from academic research level to industrial R&D.	Digitalisation		
17	Boosting Circular Bioeconomy's Supply of Renewable Materials Forests cover 42% of EUs surface. In many regions specific forest growth is increasing and management is optimised for harvesting. In other regions, especially in the Mediterranean, where the impact of climate change is predicted to be severe, creating resilient forest is particularly important. Bearing in mind the full range of demand and production constraints, RD&I can increase sustainable harvesting possibilities in Europe by 30%.	Biodiversity and natural capital	Bioeconomy	
18	Build a working quantum computer and a European quantum technology industry within the next 20 years. We are at the beginning of the 2nd quantum revolution, transforming quantum science to quantum technologies. Companies (Google, IBM, Microsoft, Intel) are investing strongly in solid-state quantum hardware (superconducting circuits, semiconductor spin qubits). Europe has a strong lead in quantum science. Now is the time to make a bold investment to become a future technology leader.	Digitalisation		
19	By 2030 75% of all Europeans will choose healthy and sustainable diets, provided through climate-smart, resource efficient, circular production systems generating 50% less waste and using 40% less resources. Building on Europe's great diversity and richness in food culture and production, citizens, producers and processors will be engaged to transform the food system to make it sustainable and to empower EU citizens to attain safe, affordable, healthy and sustainable diets	Health and wellbeing	Sustainable production	
20	By 2030, build a universal quantum computer and place it on the cloud. Bold: construct the most powerful computing devices physics tells us can be built & use it to accelerate discovery of drugs and new materials; Time-bound: measurable by metrics like qubit number and quality; Ambitious but realistic R&I actions set out in a technology road-map covering multiple solutions; Cross-disciplinary: engineers, computer scientists & quantum physicists working together with end-users across many sectors	Digitalisation		

#	Proposed mission	Code 1	Code 2	Code 3
21	<p>By 2030, EU cities shall have safe, environment-friendly, human-centered and affordable transportation for everyone (youngest to eldest and citizens) through:</p> <ul style="list-style-type: none"> o Infrastructure and vehicle technology allowing 70% emission and CO2 free urban mobility o Traffic management systems reducing congestion by 40% o Embedded intelligence enabling autonomous driving and accident prevention o Seamless inter-modality for comfort and energy efficiency o Secure systems 	Security	Transport and mobility	Communities and cities
22	Cancer: to achieve long term survival for 3 out of 4 cancer patients by 2030	Diseases		
23	Decrease the burden of diabetic foot disease by reducing the incidence of foot ulcers and amputations in Europe by 50% in 10 years, through high-quality research on ulcer prevention and healing, and innovation in precision healthcare and patient-centered approaches to diagnosis and treatment, as well as digital and assisted living technologies; this achieved using a multidisciplinary and cross-sectoral approach, providing outcomes and knowledge for effective implementation in diabetic foot care	Diseases	Healthcare	
24	Decreasing antibiotic resistance by 95% with new molecules and smart strategies eg phage therapies and/or CRISPR-based counterselection	Diseases		
25	Developing within next 15-20 years quantum computer, with the potential for executing quantum programmes utilising up to logical 100 qubits. Such machine would be important for demonstrating the potential of quantum computing and its impact on the cybersecurity and the digital economy. Current Quantum Flagship programme provides a framework for achieving such goal.	Digitalisation		
26	Development of disruptive new technologies based on nanoscience for the early diagnosis, prevention and improved treatment of age-related diseases that may reduce their incidence by a high percentage (25% approx) in the next 10 years	Diseases	Healthcare	
27	Early life stressors negatively affect health later in life. With over five million babies born yearly in the EU, it is essential to take the early life window of opportunity to offer each baby a healthy start, strengthening the foundation for a healthy life course. The target of the proposed mission is that by 2030, 98% of babies born in the EU receive evidence-based perinatal and early childhood care, and 98% of parents receive evidence-based advice and care before, during and after pregnancy.	Health and wellbeing		
28	End political corruption by 2030 in all member	Democracy		

#	Proposed mission	Code 1	Code 2	Code 3
	states.			
29	<p>Establish integrated data capture, analysis and visualization systems that enable prevention, interception and early treatment of diseases, which account for 80% of healthcare costs.</p> <p>Impact: reduce the burden of chronic diseases by 30% (aligned with SDG 3), enable learning healthcare systems to provide the right intervention for the right person at the right time and in the right place.</p>	Diseases	Healthcare	
30	<p>Establishment of a quantum industrie in 20 years: Quantum sensors & industry near quantum technologies need to be developed in close collaboration between researchers and industry in order to fulfill all criteria of commercialization. After an incubator period, a real quantum industry will result.</p>	Industry and manufacturing		
31	<p>Europe is the world leader in human-relevant non-animal biomedical and health research, and has reduced the number of animals used for scientific purposes by 90%. Animals are no longer used in education and training, in regulatory testing, or in preclinical trials. Scientifically sound innovations have been developed to provide complete explanatory pathophysiological models of human disease, and provide all the necessary data for the development and testing of new therapies.</p>	Biodiversity and natural capital		
32	<p>Feeding cities</p> <p>50 major cities in the EU have implemented food policies leading to 50% reduction of citizen's food print in 2030.</p> <p>Urbanisation is strongly increasing in the EU. Upgrading the infrastructure behind our food system will be a daunting task. That is why governments and companies must collaborate to innovate and build sustainable supply chains. . To feed a growing urban population, we are going to have to produce more with less.</p>	Sustainable production	Communities and cities	Food and agriculture
33	<p>Fire safety in a sustainable, inclusive society</p> <p>Fire safety is critical for:</p> <ul style="list-style-type: none"> - sustainable buildings: insulation, reduced ventilation, renewable materials & biopolymers, urban densification, consumer products & furnishings - clean energy and mobility, connected products - social inclusion: social housing, the elderly especially at risk from fire 	Security	Sustainable production	

#	Proposed mission	Code 1	Code 2	Code 3
	Mission should develop reliable EU fire statistics and fire safety R&D aiming to reduce fire deaths by 20% and fire-risk housing by 80%.			
34	Health-map Europe: Establish integrated data capture, analysis and visualization systems that enable prevention, interception and early treatment of diseases, which account for 80% of healthcare costs. Impact: reduce the burden of chronic diseases by 30% (aligned with SDG 3), enable learning healthcare systems to provide the right intervention for the right person at the right time and right place.	Diseases	Healthcare	
35	High quality and affordable care for all: digitisation of health Improvement of the quality and sustainability of healthcare through digitisation will drive efficiency in health, social, and informal care delivery, enable value-based healthcare systems and improve patient and citizen involvement in their personal health and care. Our mission is to add three healthy life years for every European citizen by 2030, while containing healthcare costs	Health and wellbeing	Digitalisation	
36	Increase the number of women in scientific and engineering studies to 50% before 2030 EU research and innovation needs more brains. Numerous studies done this last 15 years show how attract more women to STEM careers, but these recommendations aren't implemented. How to push universities and engineering schools put them into practice? Create financial incentives? Inform and train at all level of the citizen to create a bottom-up pression? Train decision-makers particularly, in each EU country?	Social and economic transformations		
37	Increase the penetration of more performant, competitive and circular RES to 2030 (e.g. at least 50% LCOE reduction for PV; at least 30% share of renewable energy, including electricity, on energy consumption from manufacturing process; increase the recyclability of RES generation technologies)	Sustainable production	Energy production and consumption	
38	Increase the photovoltaic conversion efficiency of flexible organic solar cells by 30% in 5 years.	Energy production and consumption		
39	Increasing economic and social participation of people with chronic diseases — reducing disability by 20% and extending average healthy life by 2 years in the next decade (See	Diseases	Social and economic transformations	

#	Proposed mission	Code 1	Code 2	Code 3
	file attached for more details)			
40	Individualised health measures for the Citizen - Increase response rate to health measures by 30% in 2030. Health measures in the clinic are based on limited amount of information which results in for example that 90% of drugs only work in 30-50% of the population. There is a need to bridge high quality real-world data and structured health data to improve treatment result for the citizen. Several areas must come together such as integrating and sharing data, implementation in Healthcare.	Health and wellbeing	Digitalisation	
41	Infectious diseases remain a leading cause of death and constant threat for society worldwide. Reasons for it include the return of old and emergence of new pathogens and antimicrobial resistance. It is thus important to develop novel tools to prevent and combat threats to public health security and reduce infectious disease burden. To this end, at least five novel vaccines for disease prevention will be developed by 2030 that should reduce global health burden from infectious diseases by 25%.	Diseases		
42	Instant diagnosis of major diseases In 2030, healthcare will be fast, precise and cost-effective. Advanced diagnostics, pervasive monitoring and innovative e-health applications will be able to detect body signals, symptoms and diseases early on. Treatment will be highly targeted, minimally invasive and increasingly effective, reducing disability and mortality from cancer, strokes and other major diseases. Diagnosis and Treatment will be delivered instantly at the point of care.	Healthcare		
43	Livable cities ensuring transport and mobility for all, but eliminating its risks, noise and pollution as well as reducing its footprint. *Cars endanger citizens lives, restrict mobility, demand attention to avoid that children are run over etc. *Motor and tyre noise cause insomnia and societal health costs *Scandals on bypassing emissions measurement (PM10, CO2,...)-> vehicle sector governance needed *Road etc. cover +30% of area! *Electrification, physical internet etc. -> new era	Transport and mobility	Communities and cities	

#	Proposed mission	Code 1	Code 2	Code 3
44	Mental Health: The rate of suicide in countries will be reduced by 10% by 20xx Mental health matters, but the world has a long way to go to achieve it. Many unfortunate trends must be reversed-neglect of mental health services and care, and abuses of human rights and discrimination against people with mental disorders and psychosocial disabilities.	Health and wellbeing		
45	Mission: Healthier diets for the poorest 10% EU citizens by 2030. Enable the poorest 10% EU citizens to live healthier lives by making healthy diet options accessible. R&I projects: education, finance, health (preventive strategies).	Health and wellbeing		
46	More and more it is acknowledged that experimental animal research is no longer the way forward. For scientific, economic and societal reasons, innovations are needed to improve prediction of health effects in humans. By the year 2030, Europe is world leader in innovation of non-animal biomedical research, by developing innovative approaches in co-design with end users, by involving regulatory bodies upfront and by continuous education as well as increasing public awareness in all member states.	Biodiversity and natural capital		
47	No more gender violence and equality for women and girls by 2030 (including gender medicine, adequate and innovative education methods, closed gender pay gaps, equal parental care, non discriminatory laws, equal representation on all levels and in all areas including traditionally female dominated ones)	Social and economic transformations		
48	One Health: Reduce in the next 10 years forecasted 30 million infections and 1 million extra deaths by 50%	Health and wellbeing		
49	Pre-symptomatic diagnosis of >50% of major human diseases (cancer, neurodegenerative diseases, inflammation and auto-immune diseases) and groundwork laid for preventive medicines by 2030	Diseases	Healthcare	
50	Recover 95% of nutrients from EU Waste Water in 200 Cities by 2027	Sustainable production	Communities and cities	
51	Reduce by 50% sick leave days, early retirement and permanent work incapacity due to chronic pain by 2030. With more than 500 million sick days per year in Europe, musculoskeletal pain causes almost 50% of all absences from work lasting at least three days in the EU and 60% of permanent work incapacity. Unsurprisingly chronic pain is one of the major reasons why people exit the labour market prematurely and it contributes significantly to disability retirement.	Health and wellbeing		
52	Reduce global biodiversity loss by 2030: The critical importance of biodiversity has been highlighted by projects such as the Tara Oceans expedition. Developing molecular understanding of how organisms interact with	Biodiversity and natural capital		

#	Proposed mission	Code 1	Code 2	Code 3
	their environments and each other would enable a better understanding of biodiversity and how to respond to its decrease. This is a multidisciplinary scientific challenge, which needs new knowledge and innovative solutions and is of key importance to present and future generations.			
53	Reducing disability when you are old. For this purpose, that put in risk the sustainability of the Welfare State (both their Health and Social components) and the quality of life of their senior citizens, a change in the focus is needed putting the emphasis not in "prosthetic" solutions when the disability is present (too late to act and 5-10% of beneficiaries) but when people is the highest risk (frail/prefrail people, that means 45% of the population to be detected and properly managed)	Health and wellbeing		
54	Sea as new space: sustainable use of the resources offered by the seas: sustainable fishery, plastic free ocean (90 % reduction of plastic waste) , utilization of cutting-edge technology in order to improve the safety and sustainability in maritime operations: 0 accidents by 2030, autonomous ships (X amount of autonomous ships tested/ cutting edge technological new solutions by 2030?), emission free logistics (x % efficiency increase).	Sea and oceans		
55	SECURE/WIDESPREAD DIGITALISATION – the geographical coverage and security of digital networks and communication is at the forefront of public and private interest. The mission should increase the network/broadband coverage to up to 90% of EU households until 2030 and define mechanisms to protect digital processes in industry and for society. This needs efforts/innovations from a variety of disciplines (e.g.informatics, maths) and includes public and private actors. Grand challenge:Digital Future	Digitalisation		
56	<p>Securing natural resources for Europe</p> <p>Resource Efficiency with respect to raw materials, food and water needs to be increased by a factor of 4 to 10 to meet the demands by 2050 for raw materials, water and food.</p> <ul style="list-style-type: none"> -Increase the share of secondary and renewable materials in mass produced, high - value products by 30% - Minimizing environmental impact of food production while increasing efficiency - minimizing organic waste by 50% - ensuring high water quality for all and at any time 	Sustainable production	Biodiversity and natural capital	

#	Proposed mission	Code 1	Code 2	Code 3
57	Sustainable green energy. We need to develop new materials for energy generation, transport, conversion, and storage based on earth abundant and environmentally friendly elements that come from sustainable sources. We should target adoption of such materials by the end of FP9 for (i) 50% of the materials used in solar energy production, (ii) 50% of light emitting devices and display technologies, and (iii) 50% of battery materials.	Energy production and consumption		
58	Sustainable Healthy: Europe's Future in Food: By 2030 75% of all Europeans will choose healthy and sustainable diets, provided through climate-smart, resource efficient, circular production generating 50% less waste and using 40% less resources. Building on Europe's great diversity and richness in food culture and production, citizens, producers and processors will be engaged to transform the food system to make it sustainable and to empower EU citizens to attain safe, healthy, sustainable diets	Health and wellbeing	Sustainable production	Food and agriculture
59	The Ocean to provide 10 % of the food and feed by 2027 The Norwegian Universities strongly advocate for a significant emphasis on Blue Growth in the next framework programme and propose a dedicated mission aimed at creating the necessary scientific and societal changes needed to ensure that the oceans provide 10 % of the global food production by 2027. Currently, only about 2 % of overall calorie intake for humans comes from the ocean.	Food and agriculture	Sea and oceans	
60	The oceans should providing 10% of sustainable food and feed by 2027	Food and agriculture	Sea and oceans	
61	To create 5 new drugs to fight antimicrobial resistance in EU by 2030	Diseases		
62	To develop assessment and awareness of Sensory Processing Sensitivity (SPS) in health, education and work sectors by 2030. Research finds SPS may be associated with positive health and productivity in good home, school, and work environments; and in poor ones, poor health outcome results. Improving these environments will foster innovative potential and reduce SPS-related costs by 50%. Progress in this will be seen in a significant reduction HSPs suffering from mental and somatic symptoms.	Health and wellbeing		
63	To reduce food insecurity, improve nutrition and increase environmental sustainability by 2030, in line with the UN's Sustainable Development Goals which include the the aim of promoting sustainable agriculture, ending hunger, achieving food security and improving human nutrition by 2030. See upload for a more detailed contribution on this mission.	Food and agriculture		

#	Proposed mission	Code 1	Code 2	Code 3
64	Unprecedented human alterations of Earth's land surface threaten human well-being. Most European countries consume more than three times the land resources available per capita worldwide, mostly outside their territorial boundaries. The mission is to rebalance overuse of land resources with human well-being in Europe by reducing 50% of land resource consumption abroad and increasing land resource efficiency by 25% in Europe.	Biodiversity and natural capital	Food and agriculture	
65	"IMPROVED HEALTH AND WELL-BEING IN CHILDREN AND YOUTH WITH 90% BY 2030" - This mission could include nutrition and physical activity (e.g. to reduce child obesity), mental health (e.g. mental health in schools, actions against depression and suicide), health of young migrants, drug abuse, sexual health (e.g. educational, ethical, medical, social and cultural customs).	Health and wellbeing		
66	(Resource Efficient Economic Growth) Improve Construction Material Efficiency: Optimise hybrid prefabrication and onsite construction processes to reduce material waste by 50% and improve building value by 2030.	Industry and manufacturing	Sustainable production	
67	"Technology for a better life: GHG emission reduction without hindering growth": Europe as role model for implementing the Paris Agreement by defining/monitoring/adapting a societally accepted transformation path for reducing GHG emissions by 2050 by at least 80% (depending on global consensus) without hindering growth. Done cost-efficiently, including all sectors, recognizing industry's key role for developing solutions for all sectors to reduce GHG emissions.	Climate science and solutions		
68	100% low-carbon, biobased, traceable and recyclable packaging by 2030	Sustainable production	Biodiversity and natural capital	
69	Reduce hospital stays by 20% by 2030. The objective would be to shift the attention and care of the hospital (or residence) to the home. It is necessary to reduce the economic and human burden of hospitalization of patients, especially when an increase is expected due to the aging of the population. In the same sense, people recover better in their usual environment than in a hospital. This would include personalized medicine, training of formal / informal caregivers, sensorization / monitoring	Healthcare		
70	Reshape the City and the Region. More than half of all people live in cities occupying only 3% of all Earth's land, but accounting for 60-80% of energy consumption and carbon emissions. By 2050 80% of all Europeans are expected to live in cities, and our ecological footprint will be even bigger. There is an urgent need to reshape the city, its infrastructure and its surrounding region, into a healthy ecosystem. We need a multidisciplinary and multi-sectoral approach for this.	Communities and cities		

#	Proposed mission	Code 1	Code 2	Code 3
71	Sustainable food systems by 2030. Goals: pesticide-free agriculture, stop biodiversity loss, 50% farmland following organic principles, 100% animal welfare, 100% sustainable diets. Implementation: interdisciplinary R&I on farms and in food sector based on strong relations among food system actors. Design diversified farming systems through improved use of natural resources, better integrate land, food and farming policy, set up transparent supply chains, promote sustainable consumption/diets.	Sustainable production	Biodiversity and natural capital	Food and agriculture
72	Reduce by at least 50% the mortality and disability of the 5 - 8 000 rare diseases by 2030.	Diseases		
73	Create a quantum computing ecosystem for the post-Moore era of computing: Moore's law is coming to an end, at least becoming economically. Quantum computing offers a paradigm for non-Moore computing. A mission of the EU should be to create an ecosystem for software and hardware developers as well as early adopters and educators to promote quantum computing.	Digitalisation		
74	Drastically reduce traffic congestion in 10 EU cities while ensuring public and private transport/mobility until 2030: By 2030, reduce congestion time in 10 European cities by 95% without conceding the freedom for individual mobility choices. Support positive economic, social and environmental links between urban, peri-urban and rural areas by inclusive and integrated transport solutions.	Transport and mobility	Communities and cities	
75	Develop and integrate new interventions (health promotion, rapid diagnostics, new classes of antimicrobials and vaccines) to reduce infection rates by resistant strains in humans and animals by 30% by 2030. Impact: reduced morbidity and mortality, broader inventory of therapeutic options for resistant strains.	Diseases		
76	100%-innovative consumer goods from 100%-recycled/re-used materials	Sustainable production		
77	Inclusive (EU-wide income-dependent health insurances?), affordable (max. 6% BNP?) and high-quality (in terms of international rankings?) health care systems by 2035	Health and wellbeing		
78	Reduce the number of smokers to 10% in every European country by 2030 (SDG 3a)	Health and wellbeing		
79	Greening cities: 50 major cities in the EU will have a 50% decrease in CO2 reduction, 10% heat reduction and 50% improvement in water drainage and air quality in 2030. A green environment has a positive effect on people's health and contributes to the liveability of a neighbourhood. Companies like to set up shops in green environments and real estate is generally more in demand there, which contributes to the economic growth of a city.	Communities and cities		

#	Proposed mission	Code 1	Code 2	Code 3
80	75% of the world food production is by 2050 eco-friendly	Sustainable production		
81	Beat the microbes: Develop and integrate new interventions (health promotion, rapid diagnostics, new classes of antimicrobials, new therapeutic approaches to infectious diseases, and vaccines) to prevent and reduce infection rates by resistant strains in humans and animals by 30% by 2030. Impact: reduced morbidity and mortality, broader inventory of therapeutic options for resistant strains.	Diseases		
82	Accelerate electrification: reach an electricity share of EU final energy demand of e.g. at least 30% by 2030	Energy production and consumption		
83	Identifying the genetic causes and underlying molecular mechanisms of all 8,000 human genetic diseases and develop targeted treatment for 50% of patients by 2040	Diseases		
84	Shorten of 80% time until diagnosis for chronic pain patients by 2030. Getting diagnosed for chronic pain takes on average one year and can take up to up to 12 years.	Health and wellbeing	Healthcare	
85	Close material loops. In 2030 90% of the materials are recycled or re-used in the EU. Products should be designed for recycling or reuse (refurbishment and remanufacturing). These products are to be ready for the market. Quality control and test protocols must be developed. Current waste management services redesigned in reverse logistics of suppliers. Support by research from technology, social sciences and business science to get products back from customer.	Sustainable production		
86	SDGs 10 Reduced Inequalities & 16 Peace, Justice and Strong Institutions Managing and mitigating migration: Protecting migrant rights & reducing flows by 70% Projects: links between forced/voluntary migration; integration in host societies; transnational/diasporic links between host-origin society; reducing 'brain drain' promoting skilled return migration to origin countries; second and third generation transnational communities; environmental/ecological causes and consequences of migration	Social and economic transformations		
87	Healthier EU-citizens: obesity decreased x % by 2030 and transport emission-related diseases decreased x % and/or urban air quality improved X amount (walking, cycling etc. as daily modes of commuting, electrical urban transport, MaaS-services as mainstream solutions, automated transport, platform economy as a base for new services combining nutrition and mobility related information; use weather, condition and satellite navigation data)	Health and wellbeing		

#	Proposed mission	Code 1	Code 2	Code 3
88	The ocean is providing 30% of sustainable energy by 2030	Energy production and consumption	Sea and oceans	
89	Burden free contraceptive and STI prevention method (against HPV, HIV, HepC and bacterial and viral STI infections) - condoms do not protect against 100% of infections, they are full of flaws and do not manage to help in cases of rape. There is a need for a new method (that can be used both in man and women) against these STIs. It should be systemic (vaginal sex, anal sex, oral sex). It would involve both health sector but also other sectors.	Diseases		
90	Feeding the Bioeconomy. In order to mitigate and reverse climate change, we will need to replace fossil feed stock for industry, and for part of our energy demand, with biomass. In order to produce enough biomass to both feed a growing world population and also allow a transition toward the bioeconomy, plant productivity will have to be drastically increased. Goal is to sustainably boost plant productivity allowing a replacement of 50% of industrial fossil feed stock by biomass in 2030	Bioeconomy		
91	Feeding a growing population. In order to meet the ever-growing demands of increased food production and field productivity, we must develop innovative new solutions to increase crop yields, versatility, and durability. We should target a rise in food production of 40% by the end of FP9.	Food and agriculture		
92	Reducing obesity and associated co-morbidities, including type 2 diabetes and cardiovascular diseases, at all ages. In Europe, more than 12% of children and 50% of adults are overweight or obese. This includes the first generation of elderly obese citizens with multi-morbidities. Obesity is a chronic condition with high socio-economic costs. The situation calls for transforming "obesogenic" environments and for a life course approach to preventing and treating obesity and its comorbidities.	Health and wellbeing	Diseases	
93	Managing & mitigating migration: Protecting the rights of migrant communities while reducing forced migration flows by 80% Projects: exploring policy links between forced and voluntary migration; integration in host societies; transnational and diasporic links host/origin society; reducing 'brain drain' & promoting skilled migration to countries of origin; exploring 2nd & 3rd generation transnational communities; combatting environmental/ecological causes and consequences of migration	Social and economic transformations		
94	Meet and surpass the World Health Organization's global target, by reducing premature deaths in the EU from non-	Health and wellbeing		

#	Proposed mission	Code 1	Code 2	Code 3
	communicable diseases – including cardiovascular disease – 28 percent by 2028. (the WHO target is 25% by 2025).			
95	Use of antibiotics in agriculture to reduce infection and increase yield is a leading cause of antimicrobial resistance. We should develop solutions to (1) improve (drug-free) breeding (e.g. housing, food), (2) prevent antibiotics from entering soil and wastewater, (3) improve detection (incl. use in the field), (4) increase removal, and (5) restrict antibiotic use in agriculture (legislations). Farmers should be educated about alternatives to using antibiotics	Sustainable production	Food and agriculture	
96	Mental disorders cause the largest burden of disability-adjusted life years worldwide. Those starting early in life represent an entry into a negative life trajectory in terms of mental and somatic, educational, socio-economic, and social outcomes. Our mission is to alter life trajectories towards increased quality of life in 50% of patients in the next 10 years. This offers opportunities for concerted actions of multiple disciplines and sectors through bottom-up research and innovation actions.	Health and wellbeing		
97	"95% OF EU 25 YEAR OLDS ARE IN EMPLOYMENT OR EDUCATION BY 2030".	Social and economic transformations		
98	(Sustainable Cities) Build Sustainably: Reduce projected embodied energy and carbon by-products by 80% in construction in Europe by 2030.	Sustainable production	Communities and cities	
99	2025: Establishment of an Integrated European Network of field trial sites to accelerate the development of European, climate adapted crops and sustainable agriculture!	Food and agriculture		
100	50% less casualties, damage and global disruption from extreme weather events in 2040. The mission is to achieve 50% less casualties, damage and global disruption from extreme weather events in 2040 compared to 2020, taking other natural disasters into account when appropriate. RTD is required into the design of mitigation measures, preparation and forecasting, response and recovery from extreme events. Specific attention needs to be given to critical infrastructures and their interrelations.	Security	Climate science and solutions	
101	"A safe and sustainable mobility for all by 2030": Objectives : no EU citizen excluded from an accessible smart and sustainable transport system Connected and automated vehicles, behaviour changes lead to 50% reduction of road injuries Automated	Transport and mobility		

#	Proposed mission	Code 1	Code 2	Code 3
	Vehicles perform cross border journeys in UE 27			
10 2	Programmable plants for sustainable crop production and protection of the environment: Productivity per ha maintained with no use of pesticides on 20% of European agricultural land until 2040.	Food and agriculture		
10 3	Reach a 45% share of renewable energy in the electricity sector in Europe by 2030, by <ul style="list-style-type: none"> o Enabling decentralised, intermittent energy sources, bi-directional grid and storage systems for the energy supply in transport, industrial and smart cities applications; o Engaging energy consumers as part of the energy grid; This supports EU emission and energy efficiency goals, increases employment in the renewable energy sector and ensures European sovereignty in power electronics.	Energy production and consumption		
10 4	EU fully energy self-supporting and independent by 2030	Security	Energy production and consumption	
10 5	Managing technology change while increasing employment in mobility and transport industries by 10% in 2030: By 2030, lead the transformation of road transport for electrified, connected, automated vehicles and services while achieving higher levels of economic productivity, jobs and growth; establish leadership for European value chains in low carbon transport solutions through research and innovation.	Transport and mobility		
10 6	Reduce unemployment to 0% by 2030	Social and economic transformations		
10 7	Develop new diagnostics and treatment options to enable early detection of dementias and slow their progression by 50% to enable home based care for 80% of demented patients. Impact: improved health and wellbeing indicators, reduced cost of hospitalisation, new treatments under development.	Diseases	Healthcare	
10 8	The 100% Renewable Energy City This mission will exploit its as yet untapped potential for renewable energy generation and energy saving. This will be achieved by technological developments that afford flexibility, including demand response, large-scale energy storage, smart grids and energy system management. Energy demand will be addressed by encouraging behavioural change in the population, for example by switching	Energy production and consumption	Communities and cities	

#	Proposed mission	Code 1	Code 2	Code 3
	from driving to cycling or changing people's patterns of energy consumption.			
109	<p>Healthy minds: Develop new diagnostics and treatment options to enable early detection of dementias and slow their progression by 50% to enable home based care for 80% of demented patients.</p> <p>Impact: improved health and wellbeing indicators, reduced cost of hospitalisation, new treatments under development</p>	Diseases	Healthcare	
110	Promote intelligent Grids for the integration of RES capacity and flexible loads. This mission could aim at achieving a minimum share of network substations equipped with remotely accessible monitoring and control devices by 2030 (e.g. around 25% for low voltage grids as stated in Set Plan action 4 "Smart resilience and Secure Energy System")	Energy production and consumption		
111	The integration of 2nd or 3rd generation migrants remains a thorny issue in many countries. Focusing on upwardly mobile migrants in professional life and seeing how and to what extent they are able to integrate in workplace contexts, will provide valuable insights into processes of integration. This related to the identities of these migrants, which is often studied via macro approaches, but which should also be studied on a local, linguistic level (how identities are constructed in real life).	Social and economic transformations		
112	<p>Mission: 50% less casualties, damage and global disruption from extreme weather events in 2040 (SDG 13, 9)</p> <p>Recent years have demonstrated society's vulnerability to extreme weather events such as hurricanes, torrential rains, drought and heat waves, often having international or even global impacts. Societal interdependencies and vulnerability of critical infrastructure are on the rise. At different stages of the disaster management cycle other stakeholders need to commit to reach this mission.</p>	Security	Climate science and solutions	
113	Digital Health: My data, my decision, my health - increase access to data for EU citizen from 55% now to 90% by 2025	Health and wellbeing	Digitalisation	
114	Increasing equality in Europe with 25% - for a social just Europe and less poverty	Security	Social and economic transformations	
115	Making precision oncology a reality by 2030, which includes reducing inappropriate and non-effective treatments by 50%	Healthcare		
116	Reuse 85% of (waste) water in water scarce regions by 2030	Sustainable production	Biodiversity and natural capital	

#	Proposed mission	Code 1	Code 2	Code 3
117	CLEAN SOIL – contaminated sites affects a high number of citizens. The mission should decrease the number of currently >300k contaminated sites in the EU by 50% to ensure economic exploitation and environmental protection+improve soil assessment for better land use alternatives til 2030. This needs efforts/innovations from a variety of disciplines (e.g.chemistry, geodesy, ecologists) and includes various actors (e.g. NGOs, biotech industry). Grand challenge: Sustainability/health/food security.	Biodiversity and natural capital		
118	The ocean is providing 10% of sustainable food and feed by 2030	Food and agriculture	Sea and oceans	
119	The ocean should provide 30% of sustainable energy by 2030	Energy production and consumption	Sea and oceans	
120	Improve Air Quality by 50% by 2050: Air pollution causes 500 000 premature deaths in Europe. and also directly impacts the environment through acidification, crop damage and eutrophication. Air pollutants result from human activities and natural causes. A 50% improvement of air quality by 2050 (against 2000 baseline values) is a clear target with easily measurable success which Europe can no longer afford to postpone.	Health and wellbeing		
121	The EU has the most sovereign computers and secured cyber-systems and internet by 2030 - Critical components for HPC - Communication networks, devices and components from secure sources - Un-hackable electronic systems and devices for safe transportation (air, rail, automated driving) - Cyber-secure medical devices and healthcare systems - Technologies to prevent crime and terrorism (threat identification by intelligent imaging, surveillance, data fusion) - Quantum technologies.	Digitalisation		
122	GHG neutral agriculture by 2035.	Food and agriculture		
123	Towards a carbon-neutral industry The European paper industry has detailed the pathways and investment needed to cut its carbon emissions by 80% while creating 50% more added-value by 2050. A 40% increase on current investment levels will be needed to transform the industry in Europe and lead the low-carbon bioeconomy. Activities to foster resource efficiency can significantly reduce energy consumption, raw material input and water use while creating more value for the citizen	Sustainable production		

#	Proposed mission	Code 1	Code 2	Code 3
124	<p>By 2030, European industry landscape structured around economically and ecologically sustainable ecosystems, cutting innovation cycle time by 4 and contributing to 60 % of high-end world manufacturing by:</p> <ul style="list-style-type: none"> oBeing customer-driven, agile, eco-efficient oInvolving large enterprises, SME's, start-ups, research institutes and academia oExtensive, balanced shared/private use of safe, secure and trusted digital assets, including digital twins (platforms, 5/6 G communication, AI, virtual technologies) 	Sustainable production		
125	<p>An inclusive Europe. Increasing the labour market participation of migrants by decreasing the 'labour market participation gap' between migrant and non-migrant citizens in Europe with 15% by 2030. Through: Living labs 'participation' with multi-stake holder collaboration, innovative participatory designs, involving migrants themselves in research, strengthening the role of 'social entrepreneurs' and 'cross sectoral boundary spanners', smart social business models.</p>	Social and economic transformations		
126	<p>Live longer & feel better – digitalisation of Healthcare</p> <p>By 2027, digitalisation of Healthcare shall lead to:</p> <ul style="list-style-type: none"> • Adding three healthy life years for every EU citizen, while containing healthcare costs. • Improving quality and sustainability of healthcare to: <ul style="list-style-type: none"> 1) drive efficiency in health, social and informal care delivery. 2) enable value-based health systems. 3) improve patient and citizen involvement. 	Healthcare	Digitalisation	
127	<p>New materials for a sustainable society - 50% of energy from renewable sources by 2030</p> <p>New and innovative functional materials are crucial for enabling a much needed change towards an environmentally sustainable society. We need to exploit the possibilities for renewable energy production and storage and we need to develop consumer goods that are less energy demanding to produce, less dependent on limited resources such as oil or rare-earth metals, and less damaging to the environment.</p>	Industry and manufacturing	Sustainable production	Energy production and consumption

#	Proposed mission	Code 1	Code 2	Code 3
128	Get fathers to share 50% of domestic work by 2030	Social and economic transformations		
129	A better connected Europe => 4 hours door-to-door by 2040 for 90% of travellers (on intra-European travel within central Europe) This mission aims to significantly reduce door-to-door journey times and increase passenger satisfaction and transport efficiency by exploiting innovative technologies (e.g. automation, big data, blockchain, IoT) or passenger-centric concepts (e.g. single tickets, much earlier reconfiguration of journeys during disruption) in transport.	Transport and mobility		
130	Inclusive cities (balanced higher, middle and lower-income housing stock in 75% of EU-cities by 2040?)	Social and economic transformations	Communities and cities	
131	50% reduction of unhealthy food-related diseases & lifestyles by 2050	Health and wellbeing	Diseases	
132	Citizen science for safe and healthy food in a sustainable world. Mission: 50% of the food consumed in Europe in 2030 from a sustainable agri-food chain.	Sustainable production	Food and agriculture	
133	Mission: By 2030, infrastructure is build or refurbished in half of the time, using half of today's resources and energy, is twice as good for 50% cost (SDG 9, 11, 12) Societies are tasked with demands for new infrastructure and the refurbishment or replacement of aging infrastructure. Infrastructure comprises much more than meets the eye: besides buildings and transport networks, it also encompasses subsoil networks (water, gas,...), flood defenses, irrigation networks, etc.	Industry and manufacturing		
134	Healthy Cities in 2030 - happier citizens - 25% greener, 25% cleaner air and 25% more inclusion	Health and wellbeing	Communities and cities	
135	Increase treatment satisfaction of 90% by 2030 and find sustainable solutions to improve patient involvement in their treatment choice. According to a recent survey, 78% of chronic pain patients are not satisfied with the treatment they receive.	Healthcare		
136	50% OF FOODS CONSUMED IN EUROPE IN 2030 MUST COME FROM A SUSTAINABLE AGRO-FOOD CHAIN	Sustainable production	Food and agriculture	
137	ZERO WASTE- Waste is omnipresent in our consumptive society.The mission should increase recycling to a total of 80% EU-wide (steel, plastics, etc and mixed waste management) and decrease its export outside EU avoiding global pollution to 20% until 2030. This needs efforts/innovations from a variety of disciplines (e.g.engineers, maths, sociology) and includes public and private actors (e.g.administration, NGOs, logistics). Grand challenge: Sustainable development and Circular Economy.	Sustainable production		

#	Proposed mission	Code 1	Code 2	Code 3
138	100 Gbits of information accessible to 90% of the European population in a sustainable way.	Digitalisation		
139	Carbon Neutral Agriculture – Driving the green economy Europe has ambitious goals to address climate change by moving towards an economy that will minimise carbon dioxide (CO2) and other greenhouse gases (GHGs) emissions. We propose working towards a Carbon Neutral agriculture by 2030. Carbon-neutrality would require European agriculture to lock away as much greenhouse gases as it emits, leading to so called 'zero net emissions' across the sector.	Sustainable production	Food and agriculture	
140	(Upgrade to Sustainable Infrastructure) Developing Infrastructure: Increase efficiency of infrastructure development by 50% through the implementation of new digital and robotic construction technologies by 2030.	Digitalisation	Industry and manufacturing	Artificial intelligence and robotics
141	Tobacco and disease burden Mission: Tobacco free Europe by 2030 Smoking is still a major contributor to disease and premature mortality. E.g. in the Netherlands approximately 13% of the total disease burden is caused by smoking. The next step is for different sectors to work together for a tobacco free Europe by 2030.	Health and wellbeing		
142	Realizing a resilient society where European digital technology is used for involvement of citizens, while ensuring safety, security and privacy. Covering 95% of citizens by 2030 will require to deploy: oInfrastructure to access digital information (fiber-to-the-home, ...); oOpen access to public sector data, knowledge and cloud-based wisdom (data mining, deep learning, ...); oSociety-wide usage of emerging digital services (enabled by user-friendliness, accessibility, anticipation, AR/VR, BCI,	Security	Social and economic transformations	
143	Healthy Brain: decreasing the burden of brain-based disorders - decreasing by 25% the human burden of brain-based disorders by 2030	Health and wellbeing		
144	Ubiquitous Connectivity The mission is to enable secure broadband access to internet at high data rates throughout Europe by 2025, with traffic being protected against manipulations & disclosure. Broadband internet access has become an	Digitalisation		

#	Proposed mission	Code 1	Code 2	Code 3
	essential resource for industrial & societal development. The technological developments shall be focused on the provision of service to the most deprived 10% of the population by a combination of terrestrial means and satellites in orbits at different heights			
14 5	Seamless, safe and sustainable personal mobility, through an integrated approach between transportation products and providers, services and infrastructure in urban areas. By 2030 80% of European citizens are estimated to live in urban areas. Safe and sustainable mobility should be accessible to the remaining 20% living in rural areas as well, especially in regions with strong tourism industry.	Transport and mobility		
14 6	Water for life and piece: 25% more water and 75% more efficient water use in developing countries by 2040. (SDG 1, 2, 6) Water shortages are believed to have contributed to several of the big migrations and refugee crises. Big demographic changes are occurring in regions of the world where water is less abundant, and hence population growth alone causes depletion of water. The anticipated change in lifestyle in the same regions will put available (water) resources under additional pressure.	Sustainable production	Biodiversity and natural capital	
14 7	Develop a plant-based CO2-negative bio-economy by 2030	Bioeconomy		
14 8	100% good quantitative and qualitative status of EU groundwater bodies by year x (in accordance with updated GWD) based on homogenised measurement protocols.	Biodiversity and natural capital		
14 9	Creating societal awareness of the importance of cultural heritage in risk areas (conflict; urban sprawl, population pressure, low education).	Cultural heritage		
15 0	Europeans have a better cultural understanding of their place in Europe and in the world. All students speak at least two European languages.	Cultural heritage		
15 1	Space Exploration - Innovative Space Propulsion - Safe Entry, Descent and Landing for robotic and human exploration - Technologies for robotic and human exploration of planets - Specific Technologies: Navigation, Sensors, Protection systems, Bio-renerative systems, innovative production systems in space (e.g. Additive Layer Manufacturing for in situ production of parts or systems), etc.	Space		
15 2	Understanding the origin of our universe and of life: there is no direct societal benefit expected but this was also the case for the "Man in the Moon" mission that is cited as an example in the report. As demonstrated in the report, this has led to important technological	Space		

#	Proposed mission	Code 1	Code 2	Code 3
	innovations now used in our day to day life as it is the case for instance with innovations derived from experiments aiming at pushing the limits of knowledge at CERN or in astrophysics.			
153	Democratisation of AI and ethical use of data: We are living in a world where undemocratic and unethical actors are gaining ground in the use of data and the development of Artificial Intelligence. This might seriously undermine the benefits of technological development turning them into threats that endanger democracy. The mission is to create a democratic and ethically sustainable AI and data ecosystem for Europe. Focusing on AI development in general is crucial for Europe.	Artificial intelligence and robotics		
154	Sustainably embracing robotics and AI: both in terms of the environment, social justice, and the financial viability of individuals, companies, and society at large. The mission includes: developing robots and AI that are compatible with the need to reduce CO2 emissions; exploring and developing societal framework conditions that make room for appropriate business models and tax schemes securing citizens' subsistence, lifelong learning, and new, sustainable jobs.	Artificial intelligence and robotics		
155	HUMAN-ARTIFICIAL INTELLIGENCE COLLABORATION FOR GOOD (SAPIENS 5.0): The general vision of Sapiens5.0 is to achieve a viable and dignified society by augmenting human decision-making through the collaboration with Artificial General Intelligence (AGI) systems. The general scientific and technological objectives in the different tiers of the value chain of Sapiens5.0 are: AGI, The Human Condition, Supporting technologies and Supporting frameworks. Please find more details on the attached documents	Artificial intelligence and robotics		
156	Realizing within 20 years a European quantum web: Quantum computers connected via quantum networks, using data from quantum sensors. This will affect many areas of society and provide EU citizens with more secure communication, computing power for many problems we could never solve otherwise, and better sensors for e.g. healthcare, environmental protection, or mobility. The Quantum Flagship is already targeting this goal.	Digitalisation		
157	Health and dementia: Europe is an aging continent with very good public health systems. Still strongly age-related neurodegenerative disorders (Alzheimer, Parkinson, SLA and others) have no cure but only care; thus a devastating impact on individuals, families and societies, unless effective means to cope with this threat are discovered. . The neurologic tsunami is in sight; however, a global effort and an European one may have a realistic chance to address the problem effectively.	Health and wellbeing	Diseases	


3 Annex 3: Mission proposals from stakeholder position papers

This list provides excerpts from mission proposals included in stakeholder position papers. The list has been automatically generated by Atlas.ti software from the coding file. The contributing stakeholders have been anonymised, providing information only on the stakeholder group each contribution is allocated to. All coded documents are enumerated. Also, each quotation containing information on mission proposals is given a unique identifier. A detailed information is provided on the codes allocated to each mission proposal. Stakeholder groups are abbreviated as follows:

- U – University
- RO – Research organisation
- BI – Business or industry
- PA – Public authority
- NGO – Non-governmental organisation
- O - Other organisation.

1. 1 PA_1

1 Quotations:

- 1.1.  1:1 key missions "Critical Infrastructure Protection", "Disaster Resilience", "Fight against Crime and T..."

Coding:


- 2.4 Disaster-resilient societies
- 2.5 Protection and security
- 2.6 Cybersecurity
- 3.2 Digital technologies
- SDG 16_Peace, justice and strong institutions

Content:

key missions "Critical Infrastructure Protection", "Disaster Resilience", "Fight against Crime and Terrorism" and "Border Security and External Security" and "Digital Security". At the same time, the programme should be open and provide flexibility to address new challenges and opportunities, which can be crosscutting, like digitalisation, or linked to the area of civil security, like the field of justice.

2. 2 PA_2

7 Quotations:

- 2.1.  2:2 renewable energy

Coding:

- 4.2 Energy supply
- SDG 7_Affordable and clean energy

Content:

renewable energy

- 2.2.  2:3 sustainable agriculture and agri-food

Coding:

- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 2_Zero hunger

Content:

sustainable agriculture and agri-food


2.3.  2:4 health and well-being

Coding:

- 1.1 Health throughout the life course
- 1.2 Environmental and social health determinants
 - SDG 3_Good health and well-being for people

Content:

health and well-being

2.4.  2:5 observation and digitisation of society

Coding:

- 3.2 Digital technologies
 - SDG 9_Industry, innovation and infrastructure

Content:

observation and digitisation of society

2.5.  2:6 development of advanced technologies and cybersecurity

Coding:

- 2.6 Cybersecurity
- 3.4 Artificial intelligence and robotics
- 3.6 High performance computing and Big Data
 - SDG 9_Industry, innovation and infrastructure
 - SDG 16_Peace, justice and strong institutions

Content:

development of advanced technologies and cybersecurity


2.6.  2:7 Fully exploit the potential of marine and maritime innovation

Coding:

- 5.4 Sea and oceans
 - SDG 14_Life below water

Content:

Fully exploit the potential of marine and maritime innovation

2.7.  2:8 biotechnology

Coding:


- 3.1 Manufacturing technologies
- 5.6 Bio-based innovation systems
 - SDG 9_Industry, innovation and infrastructure

Content:

biotechnology

3.  3 PA_3

3 Quotations:


3.1.  3:1 - Ensure strong focus on urban challenges in FP9 missions - Cities as living labs – cocreation appro...

Coding:

- 4.5 Communities and cities
- 4.7 Clean transport and mobility
- 4.8 Smart mobility
 - SDG 9_Industry, innovation and infrastructure
 - SDG 11_Sustainable cities and communities

Content:

- Ensure strong focus on urban challenges in FP9 missions
- Cities as living labs – cocreation approach to ensure embedding innovative solutions in city structures and processes – innovation not only technological solutions but also service innovations
- Service-oriented logic as the modus operandi of future cities, City as a Service

3.2.  3:2 Missions including a strong focus on digital transition, developing the European platform economy

Coding:

- 3.2 Digital technologies
 - SDG 9_Industry, innovation and infrastructure

Content:

Missions including a strong focus on digital transition, developing the European platform economy

3.3.  3:3 advancing carbon neutrality

Coding:


- 3.8 Low carbon and clean industry
- 4.1 Climate science and solutions
- 4.2 Energy supply
 - SDG 7_Affordable and clean energy
 - SDG 12_Responsible consumption and production
 - SDG 13_Climate action

Content:

advancing carbon neutrality

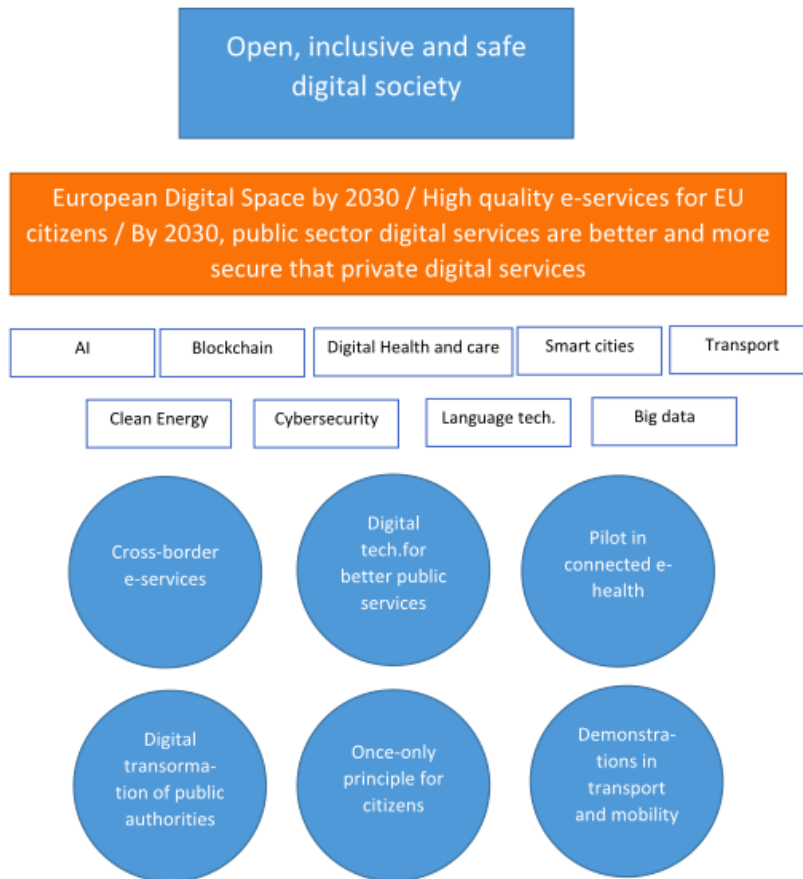
4.  4 PA_4

1 Quotations:

4.1.  5:1 Open, inclusive and safe digital society European Digital Space by 2030 / High quality e-services f..

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 2.6 Cybersecurity
- 3.2 Digital technologies
- 3.4 Artificial intelligence and robotics
- 3.6 High performance computing and Big Data
- 4.2 Energy supply
- 4.5 Communities and cities
- 4.7 Clean transport and mobility
 - SDG 3_Good health and well-being for people
 - SDG 7_Affordable and clean energy
 - SDG 9_Industry, innovation and infrastructure
 - SDG 11_Sustainable cities and communities
 - SDG 16_Peace, justice and strong institutions



5. 📄 5 PA_5

1 Quotations:

- 5.1. 🗨️ 6:2 *we consider it important to set up a research and innovation missions and initiatives in support of...*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 3.2 Digital technologies
- 3.4 Artificial intelligence and robotics
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

we consider it important to set up a research and innovation missions and initiatives in support of digitalising society (that supports the development of digital technologies (e.g. AI) for better public services, the digital transformation of health and social care, creating a European Digital Space

6. 📄 6 PA_6

1 Quotations:

- 6.1. 🗨️ 7:1 *We see the potential benefit of a mission clearly dedicated to cities to create the sustainable citi...*

Coding:

- 4.5 Communities and cities
- SDG 11_Sustainable cities and communities

Content:

We see the potential benefit of a mission clearly dedicated to cities to create the sustainable cities of the future, as recognised by the UN 2030 sustainable development agenda.

7. 7 PA_7

5 Quotations:

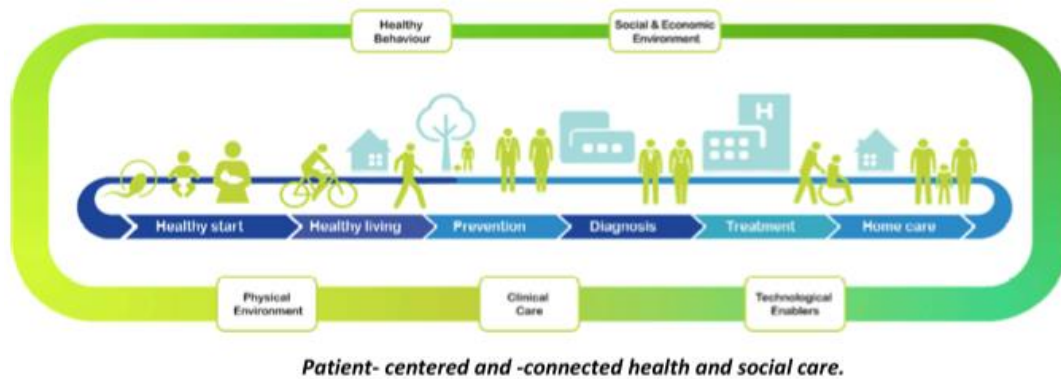
- 7.1. 9:3 Providing a healthy start for all, and adding 3 healthy life years for every European citizen by 2030...

Coding:

- 1.1 Health throughout the life course
- 1.2 Environmental and social health determinants
- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people

Content:

Start Healthy, Live Actively, Feel Better: Providing a healthy start for all, and adding 3 healthy life years for every European citizen by 2030 while containing healthcare costs.



- 7.2. 9:4 Remain worldwide competitive in advanced Manufacturing technologies

Coding:

- 3.1 Manufacturing technologies
- 3.3 Advanced materials
- 3.4 Artificial intelligence and robotics
- SDG 9_Industry, innovation and infrastructure

Content:

Remain worldwide competitive in advanced Manufacturing technologies

- 7.3. 9:5 Reliable, effective and efficient digital twins for cyber-physical systems

Coding:

- 3.1 Manufacturing technologies
- 3.2 Digital technologies
- 3.3 Advanced materials
- 3.4 Artificial intelligence and robotics
- 3.6 High performance computing and Big Data
- 3.8 Low carbon and clean industry
- SDG 9_Industry, innovation and infrastructure

Content:

Reliable, effective and efficient digital twins for cyber-physical systems

7.4. 🗨️ 9:6 The focus of the mission is to develop and proof carbon neutral technologies at the level of a comme...

Coding:

- 3.7 Circular industries
- 3.8 Low carbon and clean industry
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

The focus of the mission is to develop and proof carbon neutral technologies at the level of a commercial scale, demonstration facilities in 2025 and reduce CO2 emissions in 2050 in alignment with government policies.

7.5. 🗨️ 9:7 Disruptive Energy Storage Solutions

Coding:

- 4.9 Energy storage
- SDG 7_Affordable and clean energy

Content:

Disruptive Energy Storage Solutions

8. 📄 8 PA_8

1 Quotations:

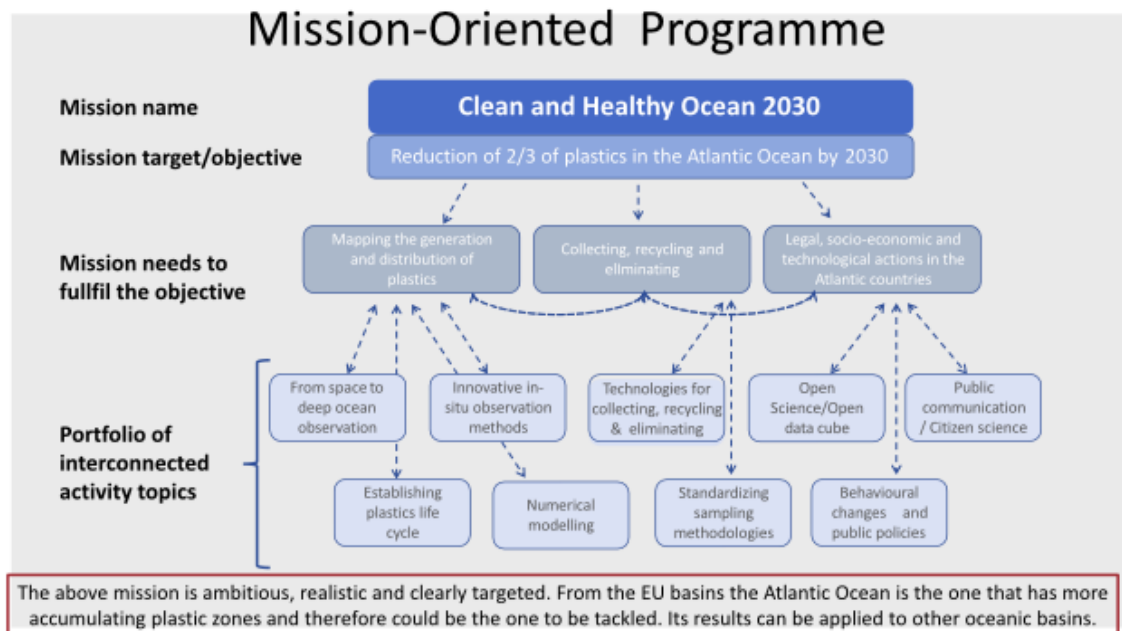
8.1. 🗨️ 11:1 Clean and Healthy Ocean 2030 Reduction of 2/3 of plastics in the Atlantic Ocean by 2030

Coding:

- 5.1 Environmental observation
- 5.4 Sea and oceans
- SDG 14_Life below water


Content:

Clean and Healthy Ocean 2030
Reduction of 2/3 of plastics in the Atlantic Ocean by 2030



9. 📄 9 PA_9

2 Quotations:


- 9.1.  12:1 50 major cities in the EU have implemented food policies leading to 50% reduction of citizen's food...

Coding:

- 4.5 Communities and cities
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 11_Sustainable cities and communities
- SDG 12_Responsible consumption and production

Content:

50 major cities in the EU have implemented food policies leading to 50% reduction of citizen's food print in 2030.

- 9.2.  12:2 50 major cities in the EU will have a 50% decrease in CO2 reduction, 10% heat reduction and 50% impr...

Coding:


- 4.1 Climate science and solutions
- 4.5 Communities and cities
- 5.1 Environmental observation
- 5.2 Biodiversity and natural capital
- SDG 11_Sustainable cities and communities
- SDG 13_Climate action

Content:

50 major cities in the EU will have a 50% decrease in CO2 reduction, 10% heat reduction and 50% improvement in water drainage and air quality in 2030.

10. 10 PA_10

6 Quotations:


- 10.1.  14:1 Enabling Our Ageing Population – Developing new technologies, services and systems to support an age...

Coding:

- 1.1 Health throughout the life course
- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people

Content:

Enabling Our Ageing Population – Developing new technologies, services and systems to support an ageing population is a current challenge that will take on further urgency as the proportion of older people increases globally. Themes would encompass advances in personalised medicine, medical diagnostics and assisted living technologies, as well as new models for social care and services tailored for an ageing population.

- 10.2.  14:2 Addressing antimicrobial resistance – A mission that addresses the challenge of antimicrobial resist...


Coding:

- 1.4 Infectious diseases
- SDG 3_Good health and well-being for people

Content:

Addressing antimicrobial resistance – A mission that addresses the challenge of antimicrobial resistance using a one-health approach. Alongside the development of new drugs and types of therapeutics, streams under this mission could include understanding of mechanisms of resistance and understanding the spread of resistance, identifying ways to prevent the spread and transmission of infection, development and implementation of rapid and accurate

diagnostics, and effective public health interventions, including public understanding of and attitudes to antimicrobial resistance.


10.3.  14:3 Providing for safe, sustainable and sufficient food supplies – This mission would encompass innovati...

Coding:

- 1.2 Environmental and social health determinants
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 3_Good health and well-being for people
- SDG 12_Responsible consumption and production

Content:

Providing for safe, sustainable and sufficient food supplies – This mission would encompass innovative methods to improve food production, reduce food waste and ensure food safety and authenticity. Examining our social and cultural relationships with food, alongside research into public health interventions that encourage improvements in diet would also be part of this mission.


10.4.  14:4 Addressing lifestyle diseases – led by sociological and psychological efforts to change behaviours t...

Coding:

- 1.2 Environmental and social health determinants
- SDG 3_Good health and well-being for people

Content:

Addressing lifestyle diseases – led by sociological and psychological efforts to change behaviours that lead to diseases including obesity, diabetes, addictions and anorexia, this mission will draw upon food chemistry and formulation, as well as medical interventions to improve health, quality of life and life expectancy.


10.5.  14:5 Sustainable Low Carbon Energy for All – A mission to deliver advances across energy efficiency, expl...

Coding:

- 4.2 Energy supply
- 4.3 Energy systems and grids
- 4.4 Buildings and industrial facilities in energy transition
- 4.9 Energy storage
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

Sustainable Low Carbon Energy for All – A mission to deliver advances across energy efficiency, exploitation, storage and distribution to ensure adequate, equitable and sustainable energy for all. The mission will need to encompass research into materials and processes to deliver new and improved technologies, as well as routes to implementation on the scale needed for public and industrial use. Research into markets, consumer attitudes and preferences will be essential to understand how to undertake changes across the current system.

10.6.  14:6 A Clean, Sustainable World – This mission strives to engender resource efficiency, the circular econ...

Coding:


- 3.7 Circular industries
- 5.2 Biodiversity and natural capital
- SDG 12_Responsible consumption and production

Content:

A Clean, Sustainable World – This mission strives to engender resource efficiency, the circular economy and the protection and replacement of critical elements. Urgent targets include reducing the use of, reusing and recycling plastics with an aim to have zero plastics being added to the environment by 2030; traceability and recycling of all elements in disposable electronic gadgets. There is a large social element in altering attitudes towards recycling, recycled goods and reduced packaging.

11. 11 PA_11

6 Quotations:

11.1.  16:1 Individualised health measures for the citizen. Mission statement: Increase response rate to health...

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
 - SDG 3_Good health and well-being for people


Content:

Individualised health measures for the citizen.

Mission statement:

Increase response rate to health measures by 30% in 2030.

Health measures in the clinic are based on limited amount of information which results in for example that 90% of drugs only work in 30-50% of the population. There is a need to bridge high quality real-world data and structured health data to improve treatment result for the citizen. Several areas must come together such as integrating and sharing data, implementation in healthcare, precision medicine, prevention, diagnostics, economic models, regulatory frameworks and health management.

11.2.  16:2 A world-class sustainable manufacturing industry in Europe Mission Statement: European manufacturing...

Coding:


- 3.1 Manufacturing technologies
- 3.8 Low carbon and clean industry
 - SDG 9_Industry, innovation and infrastructure
 - SDG 12_Responsible consumption and production

Content:

A world-class sustainable manufacturing industry in Europe

Mission Statement:

European manufacturing industry is vital in providing, growth, new jobs, and European competitiveness. Reducing the carbon footprint at the same time as more manufacturing is being done in Europe puts pressure on new processes and solutions. Innovative technologies that use less material and energy are vital for a sustainable European manufacturing industry. Connectedness and digital solutions

11.3.  16:3 Reaching self-sufficiency for innovation critical raw materials by 2050 Mission Statement: Supply of...

Coding:

- 3.7 Circular industries
- 5.2 Biodiversity and natural capital
 - SDG 12_Responsible consumption and production

Content:

Reaching self-sufficiency for innovation critical raw materials by 2050

Mission Statement:

Supply of raw materials is critical for European competitiveness and self- sustainability. A controlled and resource efficient raw materials supply is a pre- requisite for a successful European industry. New innovative products rely heavily on specialized materials and elements. Failing to access innovation critical raw materials will hamper development and

slow down innovation of products and infrastructure needed for a fossil fuel free society, like solar panels, wind turbines and other products and infrastructure components. We need to explore European resources, both primary and secondary through exploration and excavation as well as recycling and urban mining. With the increasing electrification of transport systems, even commodity elements like copper will be seen as innovation critical raw materials.

11.4. 🗨️ 16:4 A Shared and Liveable Society for All by 2040 Mission statement: A Europe ensuring well-being and a...

Coding:

- 4.5 Communities and cities
- 4.7 Clean transport and mobility
- SDG 11_Sustainable cities and communities

Content:

A Shared and Liveable Society for All by 2040
Mission statement:

A Europe ensuring well-being and a high quality of living by providing equal access and utilization of physical as well as digital space and functions. This includes a transport system which not only plays a vital role in moving goods and people but also demand less land in urban areas enabling attractive public spaces.

11.5. 🗨️ 16:5 One digital Europe Mission Statement: A sustainable, secure and effective digital infrastructure is...

Coding:

- 3.2 Digital technologies
- SDG 9_Industry, innovation and infrastructure

Content:

One digital Europe
Mission Statement:

A sustainable, secure and effective digital infrastructure is essential to ensure future European competitiveness, innovation capacity as well as an efficient public administration. A data-driven society enables new business models and citizen services.

11.6. 🗨️ 16:6 Humans and machines in harmony Mission Statement: The current rapid level of innovation in the field...

Coding:

- 2.3 Social and economic transformations
- 3.4 Artificial intelligence and robotics
- 3.6 High performance computing and Big Data
- SDG 9_Industry, innovation and infrastructure

Content:

Humans and machines in harmony
Mission Statement:

The current rapid level of innovation in the fields of AI, robotics and automation pose challenges for the society to adapt to and to embrace these new technologies, that have the potential to transform both industry and society. Trust and integrity are key components in utilizing these possibilities. There will be both ethical and technological challenges. Failure to transform or to adapt will inevitably lead to decreased competitiveness and strain on the society as a whole. Human-machine interaction will be a key part of our lives very soon, so a clear understanding

12. 📄 12 BI_1

1 Quotations:

12.1. 🗨️ 17:1 To understand Sensory Processing Sensitivity (SPS; also known as environmental sensitivity or High S...


Coding:

- 1.2 Environmental and social health determinants
- 1.3 Non-communicable and rare diseases
- SDG 3_Good health and well-being for people

Content:

To understand Sensory Processing Sensitivity (SPS; also known as environmental sensitivity or High Sensitive Personality), and implement awareness, objective assessment and management of SPS in health, education and employment sectors by 2030.

13.  13 BI_2**9 Quotations:**


13.1.  *18:1 Strong increase of low-carbon technologies (up to 90% of European energy market)*

Coding:

- 3.8 Low carbon and clean industry
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure

Content:

Strong increase of low-carbon technologies (up to 90% of European energy market)


13.2.  *18:2 Cyber secure Europe*

Coding:

- 2.6 Cybersecurity
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

Cyber secure Europe


13.3.  *18:3 Industrial data platforms and markets to raise data economy*

Coding:

- 3.2 Digital technologies
- 3.6 High performance computing and Big Data
- SDG 9_Industry, innovation and infrastructure

Content:

Industrial data platforms and markets to raise data economy

13.4.  *18:4 Wellbeing in aging population - support older persons to remain active and healthy*

Coding:

- 1.1 Health throughout the life course
- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people

Content:

Wellbeing in aging population - support older persons to remain active and healthy

13.5.  *18:5 Digital evolution of Europe's manufacturing*

Coding:

- 3.1 Manufacturing technologies
- 3.2 Digital technologies

- 3.4 Artificial intelligence and robotics
- SDG 9_Industry, innovation and infrastructure

Content:

Digital evolution of Europe's manufacturing

13.6.  18:6 *Cloud interoperability by design approach*

Coding:

- 3.5 Next generation Internet
- 3.6 High performance computing and Big Data
- SDG 9_Industry, innovation and infrastructure

Content:

Cloud interoperability by design approach

13.7.  18:7 *Reshoring industrial production to Europe*

Coding:

- 3.1 Manufacturing technologies
- 3.2 Digital technologies
- SDG 9_Industry, innovation and infrastructure

Content:

Reshoring industrial production to Europe

13.8.  18:8 *5G communications for a safer digital Europe*

Coding:

- 3.2 Digital technologies
- 3.5 Next generation Internet

Content:

5G communications for a safer digital Europe

13.9.  18:9 *Strong reduction of deaths due to heart attack*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 3.6 High performance computing and Big Data
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Strong reduction of deaths due to heart attack

14.  14 BI_3

1 Quotations:

14.1.  19:1 *Accompanying Health of Older People by Connected Object and Prevention of Undernutrition and Dehydra...*

Coding:


- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Accompanying Health of Older People by Connected Object and Prevention of Undernutrition and Dehydration.

15.  15 BI_4

1 Quotations:

- 15.1.  20:1 to create an artificial pseudo-subjective system capable of finding the right behavior in an arbitra...

Coding:


- 3.4 Artificial intelligence and robotics
- SDG 9_Industry, innovation and infrastructure

Content:

to create an artificial pseudo-subjective system capable of finding the right behavior in an arbitrary situation.

16. 16 BI_5

3 Quotations:

- 16.1.  21:1 Create value through 'zero waste' biorefineries to reach the low carbon economy goals

Coding:

- 5.6 Bio-based innovation systems
- SDG 12_Responsible consumption and production

Content:

Create value through 'zero waste' biorefineries to reach the low carbon economy goals


- 16.2.  21:2 Add value to food and feed production with the bio-based industry

Coding:

- 5.5 Food systems
- 5.6 Bio-based innovation systems
- SDG 2_Zero hunger
- SDG 12_Responsible consumption and production

Content:

Add value to food and feed production with the bio-based industry

- 16.3.  21:3 Mobilise the consumer for the sustainable circular bioeconomy through bio-based products

Coding:


- 5.6 Bio-based innovation systems
- SDG 12_Responsible consumption and production

Content:

Mobilise the consumer for the sustainable circular bioeconomy through bio-based products

17. 17 BI_6

3 Quotations:


- 17.1.  22:1 Low carbon industries

Coding:

- 3.8 Low carbon and clean industry
- 5.6 Bio-based innovation systems
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

Low carbon industries

- 17.2.  22:2 Materials driving safe & circular use Addressing health and environment Inspired by Retaining functi...

Coding:

- 3.3 Advanced materials
- 3.7 Circular industries
- 5.6 Bio-based innovation systems
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

Materials driving safe & circular use
 Addressing health and environment Inspired by
 Retaining functionality and durability Enabling value creation and circularity

17.3. 🗨️ 22:3 Affordable and abundant low carbon energy for all Powering clean energy production and enabling stor...

Coding:

- 3.3 Advanced materials
- 4.2 Energy supply
- 4.3 Energy systems and grids
- 4.9 Energy storage
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

Affordable and abundant low carbon energy for all
 Powering clean energy production and enabling storage and use

18. 📄 18 BI_7

2 Quotations:

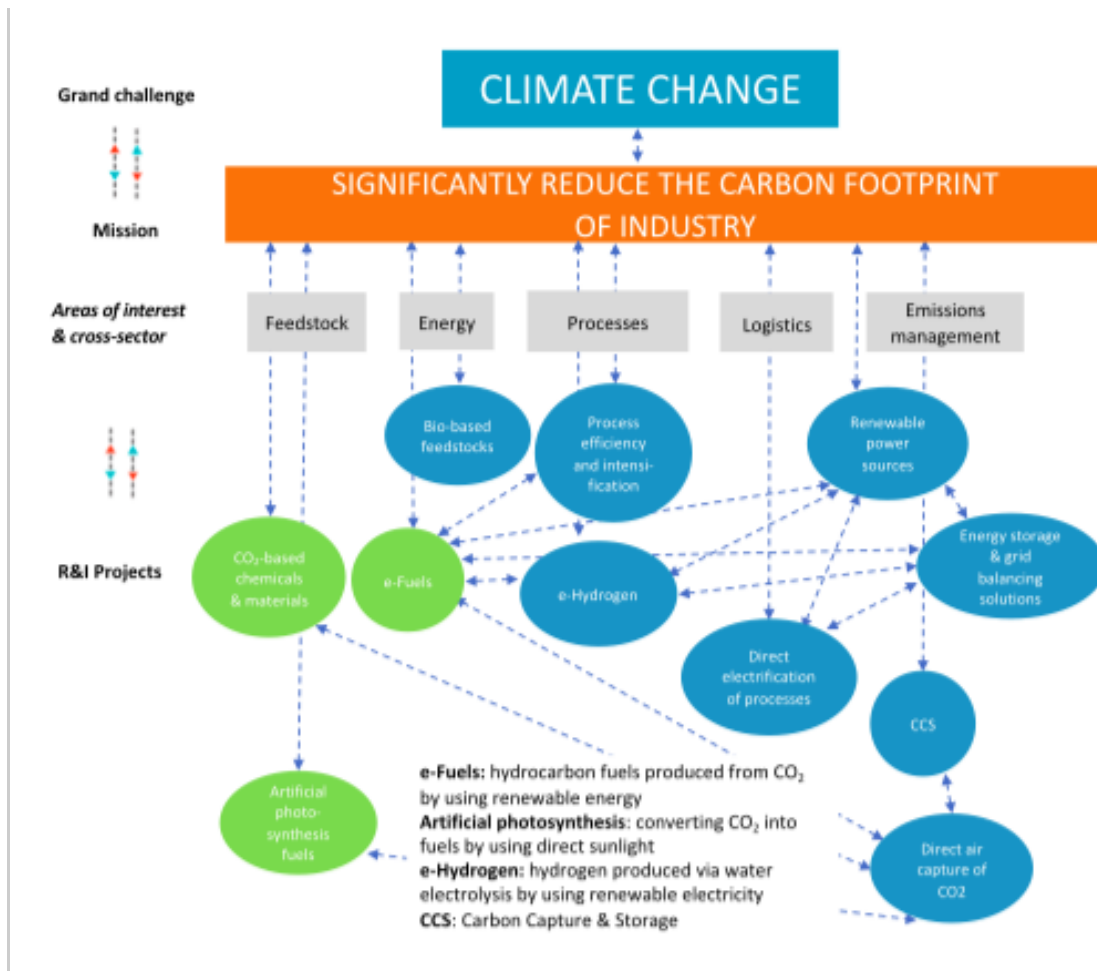
18.1. 🗨️ 23:1 SIGNIFICANTLY REDUCE THE CARBON FOOTPRINT OF INDUSTRY

Coding:

- 3.8 Low carbon and clean industry
- 4.1 Climate science and solutions
- 4.2 Energy supply
- 4.3 Energy systems and grids
- 4.7 Clean transport and mobility
- 4.9 Energy storage
- 5.1 Environmental observation
- 5.6 Bio-based innovation systems
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production
- SDG 13_Climate action

Content:

SIGNIFICANTLY REDUCE THE CARBON FOOTPRINT OF INDUSTRY



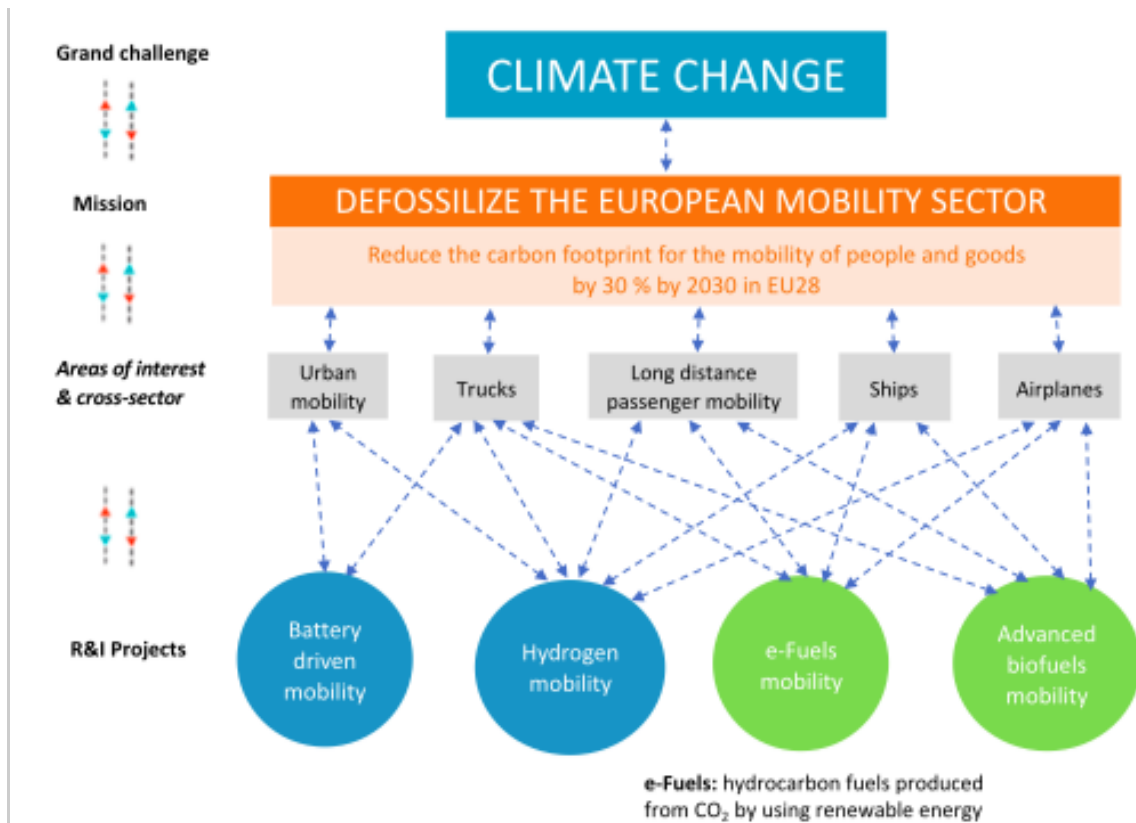
18.2. 23:2 Reduce the carbon footprint for the mobility of people and goods by 30 % by 2030 in EU28

Coding:

- 4.1 Climate science and solutions
- 4.2 Energy supply
- 4.7 Clean transport and mobility
- 5.6 Bio-based innovation systems
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 13_Climate action

Content:

Reduce the carbon footprint for the mobility of people and goods by 30 % by 2030 in EU28



19. 19 BI_8

1 Quotations:

- 19.1. 24:2 • Adding three healthy life years for every European citizen by 2030, while containing healthcare co...

Coding:

- 1.1 Health throughout the life course
- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people

Content:

- Adding three healthy life years for every European citizen by 2030, while containing healthcare costs.
- Improve quality and sustainability of healthcare through digitisation to 1) drive efficiency in health, social and informal care delivery; 2) enable value-based health systems; 3) improve patient and citizen involvement.

20. 20 BI_9

1 Quotations:

- 20.1. 26:1 Socially prosperous and environmentally inclusive agriculture by Integrated Farm Management in 2030

Coding:


- 5.2 Biodiversity and natural capital
- 5.3 Agriculture, forestry and rural areas
- SDG 2_Zero hunger
- SDG 12_Responsible consumption and production
- SDG 15_Life on land

Content:

Socially prosperous and environmentally inclusive agriculture by Integrated Farm Management in 2030

21. 21 BI_10

3 Quotations:


21.1.  27:1 *Emission-free individual mobility in 10 European cities by 2030*

Coding:

- 4.5 Communities and cities
- 4.7 Clean transport and mobility
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

Emission-free individual mobility in 10 European cities by 2030


21.2.  27:2 *Drastically reduce traffic congestion in 10 EU cities while ensuring public and private transport/mo...*

Coding:

- 4.5 Communities and cities
- 4.7 Clean transport and mobility
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

Drastically reduce traffic congestion in 10 EU cities while ensuring public and private transport/mobility until 2030

21.3.  27:3 *Managing technology change while increasing employment in mobility and transport industries by 10% i...*

Coding:

- 2.3 Social and economic transformations
- 4.7 Clean transport and mobility
- SDG 8_Decent work and economic growth
- SDG 9_Industry, innovation and infrastructure

Content:

Managing technology change while increasing employment in mobility and transport industries by 10% in 2030

22. 22 BI_11

1 Quotations:

22.1.  28:1 *THE MISSION ON STEEL*

Coding:


- 3.1 Manufacturing technologies
- 3.8 Low carbon and clean industry
- SDG 9_Industry, innovation and infrastructure

Content:

THE MISSION ON STEEL

23. 23 BI_12

3 Quotations:

23.1.  29:1 *GOAL 2030: First full scale factories with true 0- footprint in each of these material sectors: Non-...*

Coding:

- 3.8 Low carbon and clean industry
- 5.6 Bio-based innovation systems
- SDG 12_Responsible consumption and production

Content:


GOAL 2030:

First full scale factories with true 0- footprint in each of these material sectors: Non-ferrous metals

Steel sector

Concrete sector

chemical sector


- 23.2.  29:2 *The concept of ecologic true prices has been piloted by 2025 through policy development and communic...*

Coding:

- 2.3 Social and economic transformations
- 3.2 Digital technologies
- SDG 9_Industry, innovation and infrastructure
- SDG 10_Reducing inequalities

Content:

The concept of ecologic true prices has been piloted by 2025 through policy development and communication technology in a wide range of sectors. This has led to the launch of a European roadmap towards true ecologic prices in 2025 and to be implemented by 2030.

- 23.3.  29:3 *The customer group of early adopters has created a dynamic sustainable market where brands are compe...*

Coding:

- 2.3 Social and economic transformations
- 3.8 Low carbon and clean industry
- SDG 12_Responsible consumption and production

Content:

The customer group of early adopters has created a dynamic sustainable market where brands are competing on their sustainability performance.

In 2030 over 10% of products available on the market are “sustainable” (meaning a footprint of 0 or smaller/regenerative) with a further 40% are low-footprint and therefore the non-sustainable options have become the exemption in 2030 rather than the norm as in 2018.

24. 24 BI_13

1 Quotations:

- 24.1.  30:1 *research and experimental development managed in the process of the new-techno logistics platform wi...*

Coding:

- 2.3 Social and economic transformations
- 3.2 Digital technologies
- 3.4 Artificial intelligence and robotics
- 3.6 High performance computing and Big Data

Content:

research and experimental development managed in the process of the new-techno logistics platform will lead to an increase of the stock of knowledge in the industry market and it will devise new applications of available knowledge, by adopting new technological

solutions and by developing new modes on issues such as “big data”, “artificial intelligence”, “machine learning systems”.

25. 25 BI_14

2 Quotations:


25.1.  31:1 *Digitizing the blue industry*

Coding:

- 3.2 Digital technologies
- 3.5 Next generation Internet
- 5.4 Sea and oceans
- SDG 9_Industry, innovation and infrastructure
- SDG 14_Life below water

Content:

Digitizing the blue industry

25.2.  31:2 *Ocean Economy - Making the ocean the prime source for work, food and energy*

Coding:

- 3.1 Manufacturing technologies
- 4.2 Energy supply
- 5.4 Sea and oceans
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 14_Life below water

Content:

Ocean Economy - Making the ocean the prime source for work, food and energy



26. 26 BI_15

5 Quotations:

26.1. 32:9 Smart Energy Systems. Europe can lead the transition towards distributed and smart energy systems fo...

Coding:

- 4.3 Energy systems and grids
 - SDG 7_Affordable and clean energy
 - SDG 9_Industry, innovation and infrastructure

Content:

Smart Energy Systems. Europe can lead the transition towards distributed and smart energy systems for enhancing sustainable production, distribution and storage of energy

26.2. 32:10 Cradle to Cradle Economy. The EU should become world leader in sustainability transition following t...

Coding:

- 3.7 Circular industries
 - SDG 12_Responsible consumption and production

Content:

Cradle to Cradle Economy. The EU should become world leader in sustainability transition following the cradle to cradle design principles and learning from the experimentation across different sectors.

26.3. 32:11 Intelligent Reforestation. European forest management could gain momentum with new sustainable smart...

Coding:

- 4.1 Climate science and solutions
- 5.3 Agriculture, forestry and rural areas
- SDG 13_Climate action
- SDG 15_Life on land

Content:

Intelligent Reforestation. European forest management could gain momentum with new sustainable smart solutions for reforestation as means to fight desertification and mitigate the impacts of climate change.

26.4. 🗨️ *32:12 Beyond Jobs. Europe should lead a new way to understand that jobs are only a means. Social innovatio...*

Coding:

- 2.3 Social and economic transformations
- SDG 8_Decent work and economic growth

Content:

Beyond Jobs. Europe should lead a new way to understand that jobs are only a means. Social innovation is urgently needed to develop alternatives to jobs as the only way to gain access to wealth.

26.5. 🗨️ *32:13 Digital Democracy. Europe can lead exploiting the capabilities of technology to create an open and e...*

Coding:

- 2.1 Democracy
- 3.2 Digital technologies
- SDG 10_Reducing inequalities
- SDG 16_Peace, justice and strong institutions

Content:

Digital Democracy. Europe can lead exploiting the capabilities of technology to create an open and engaged society while making the most of "collective intelligence". Democracy should be understood as a better way to solve certain complex social problems than markets or hierarchies.

27. 📄 27 BI_16

1 Quotations:

27.1. 🗨️ *33:1 Healthier citizens thanks to early and smart diagnostics for diseases of importance for Europe an...*

Coding:

- 1.3 Non-communicable and rare diseases
- 1.4 Infectious diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people

Content:

Healthier citizens thanks to early and smart diagnostics for diseases of importance for Europe and abroad

28. 📄 28 BI_17

1 Quotations:

28.1. 🗨️ *34:1 water reuse in agriculture by the application of the living lab concept aiming at the constitution o...*

Coding:

- 5.2 Biodiversity and natural capital
- 5.3 Agriculture, forestry and rural areas


- SDG 6_Clean water and sanitation
- SDG 15_Life on land

Content:

water reuse in agriculture by the application of the living lab concept aiming at the constitution of a harmonized common European policy by improving integration across the various and multiple local initiatives.

29.  29 BI_18

3 Quotations:


29.1.  *35:1 Induce changes in healthcare systems, medical infrastructures organisation and Medical practices in...*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Induce changes in healthcare systems, medical infrastructures organisation and Medical practices in order to fully leverage the benefits and the return on investment in innovative medical technologies. Medical practices, health institutions and systems management, remain very conservative often with short term visions which are too often disconnected from the potential benefits of increasingly innovative medical technologies which can drive more sustainable healthcare systems in Europe.


29.2.  *35:2 Stimulate innovative, more collaborative, inclusive and risk sharing financing models to reward inno...*

Coding:

- 1.6 Health care systems
- 2.3 Social and economic transformations
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Stimulate innovative, more collaborative, inclusive and risk sharing financing models to reward innovation and contribution. For health care systems to fully benefit from the changes which innovative medical technologies can drive they need to move away from current fee for service and classic HTA models and imagine, embrace as well as organise new value and outcome based procurement and payment models.

29.3.  *35:3 Help the translation of medical technology industry innovations from benches and labs all the way to...*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- 2.3 Social and economic transformations
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Help the translation of medical technology industry innovations from benches and labs all the way to patients, hospital and healthcare systems. Still too many innovations in the medical technology industry, driven from Start-ups and SMEs never make it through the "valley of death" of an heavily and

increasingly regulated market access process. Solutions and support are needed to preserve our European MedTech innovative fabulous potential.

30. 30 BI_19

1 Quotations:

30.1. 36:1 *Improve the EU's water footprint while remaining competitive at international level*

Coding:

- 5.2 Biodiversity and natural capital
- SDG 6_Clean water and sanitation

Content:

Improve the EU's water footprint while remaining competitive at international level

Grand Challenge:

Water scarcity

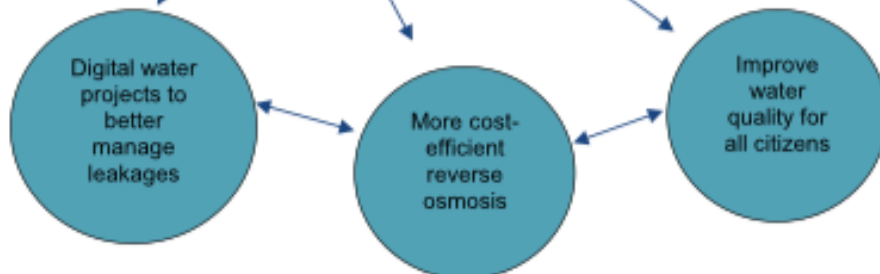
Mission:

Improve the EU's water footprint while remaining competitive at international level

Areas of interest:

Energy Human health Marine life
 Digital Data Agriculture Food safety

R&I Projects:



31. 31 BI_20

3 Quotations:

31.1. 37:1 *Smart Ocean is the global standard of ocean operations and monitoring by 2030*

Coding:

- 3.2 Digital technologies
- 5.1 Environmental observation
- 5.4 Sea and oceans
- SDG 9_Industry, innovation and infrastructure
- SDG 14_Life below water

Content:

Smart Ocean is the global standard of ocean operations and monitoring by 2030

31.2. 37:2 *The ocean is providing 30% of sustainable energy by 2030*

Coding:

- 4.2 Energy supply
- 5.4 Sea and oceans
- SDG 7_Affordable and clean energy
- SDG 14_Life below water

Content:

The ocean is providing 30% of sustainable energy by 2030

31.3. 🇪🇺 37:3 *The ocean is providing 10% of sustainable food by 2030*

Coding:

- 5.4 Sea and oceans
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 12_Responsible consumption and production
- SDG 14_Life below water

Content:

The ocean is providing 10% of sustainable food by 2030

32. 🇪🇺 32 BI_21

2 Quotations:

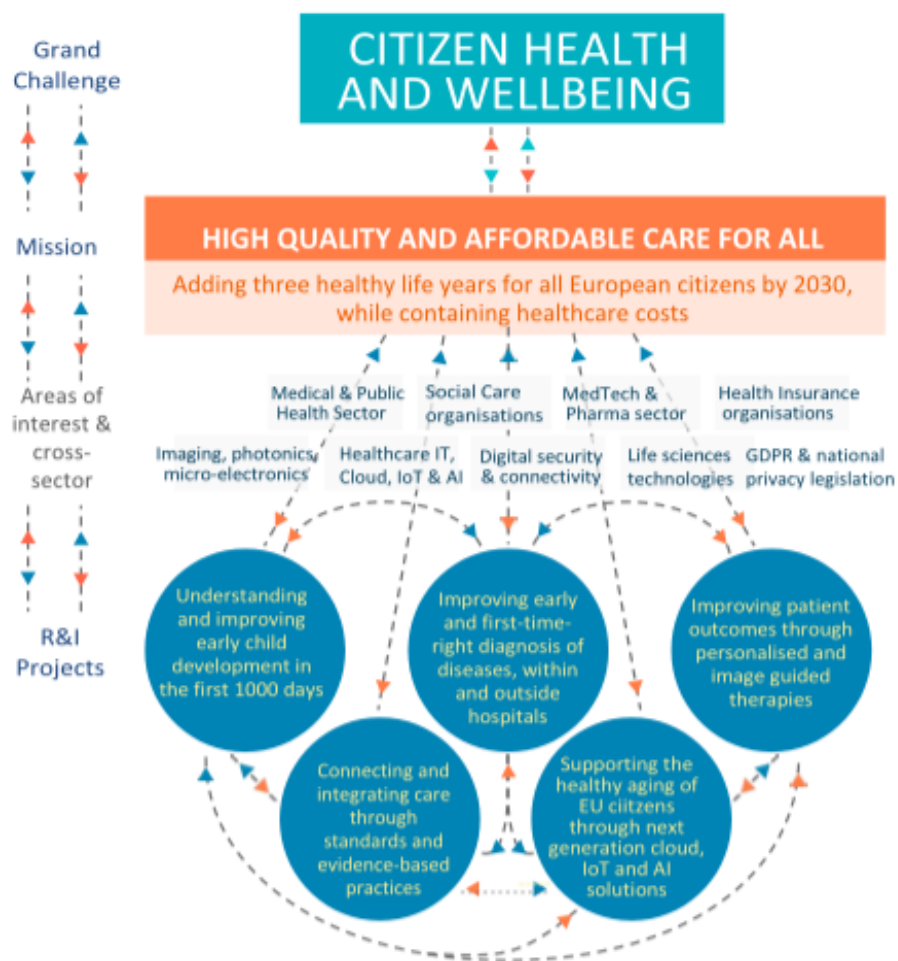
32.1. 🇪🇺 38:1 *Adding three healthy life years for all European citizens by 2030, while containing healthcare costs*

Coding:

- 1.1 Health throughout the life course
- 1.3 Non-communicable and rare diseases
- 1.4 Infectious diseases
- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people

Content:

Adding three healthy life years for all European citizens by 2030, while containing healthcare costs



32.2. 🇪🇺 38:2 100% evidence-based parent and child care before, during and after pregnancy by 2030

Coding:

- 1.2 Environmental and social health determinants
- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_ Good health and well-being for people

Content:

100% evidence-based parent and child care before, during and after pregnancy by



33. 33 BI_22

1 Quotations:

33.1. 39:1 Zero emission Vertical flight: a new dimension for EU mobility

Coding:

- 4.8 Smart mobility
- SDG 9_Industry, innovation and infrastructure

Content:

Zero emission Vertical flight:
a new dimension for EU mobility

34. 34 BI_23

2 Quotations:

34.1. 40:1 6m apprentices per year from 2030 onward

Coding:

- 2.3 Social and economic transformations
- SDG 4_Quality education

Content:

6m apprentices per year from 2030 onward

34.2. 🗨️ 40:2 Improve air quality by 50% in the EU by 2050 (against 2000 baseline values)

Coding:

- 4.1 Climate science and solutions
- 5.1 Environmental observation
- 5.2 Biodiversity and natural capital
- SDG 11_Sustainable cities and communities
- SDG 13_Climate action

Content:

Improve air quality by 50% in the EU by 2050 (against 2000 baseline values)

35. 📄 35 BI_24

1 Quotations:

35.1. 🗨️ 41:1 BIOLOGICAL CARBON CAPTURE AND STORAGE – FOREST TO IMPROVE LIVES

Coding:

- 4.1 Climate science and solutions
- 5.3 Agriculture, forestry and rural areas
- SDG 13_Climate action
- SDG 15_Life on land

Content:

BIOLOGICAL CARBON CAPTURE AND STORAGE – FOREST TO IMPROVE LIVES

36. 📄 36 BI_25

1 Quotations:

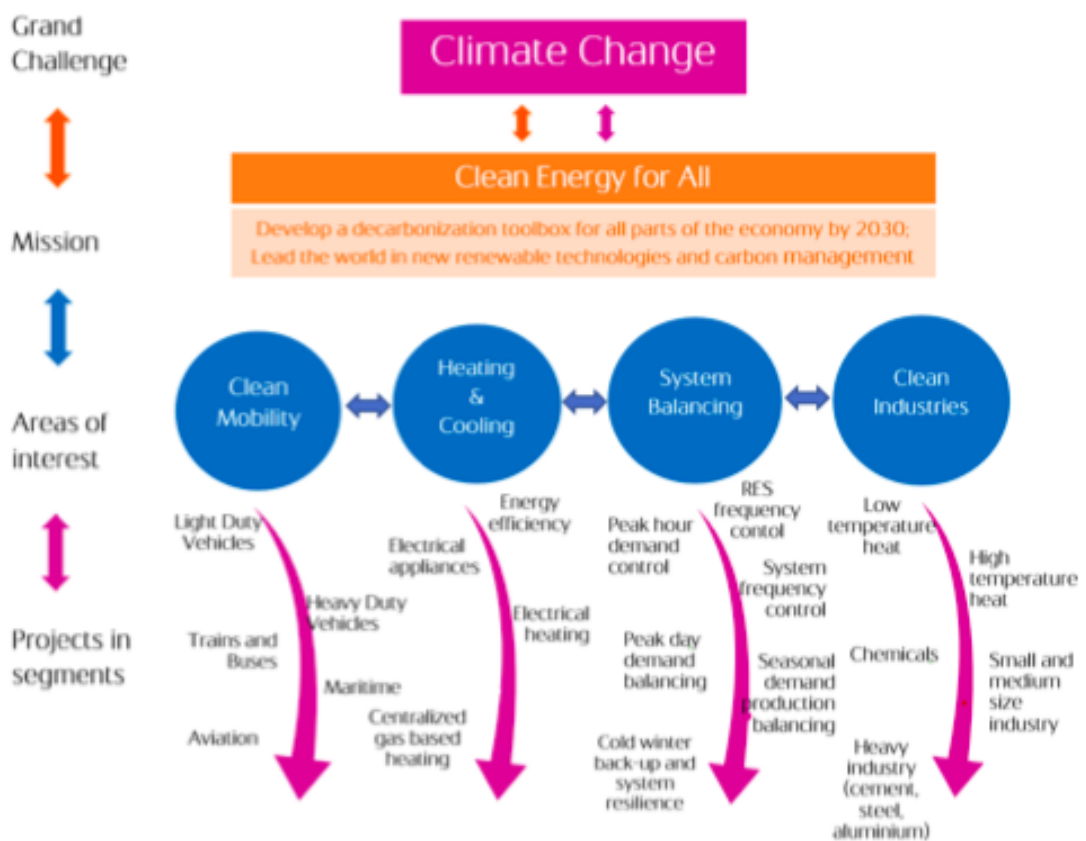
36.1. 🗨️ 42:1 A full energy and climate solutions toolbox by 2030

Coding:

- 3.8 Low carbon and clean industry
- 4.1 Climate science and solutions
- 4.2 Energy supply
- 4.3 Energy systems and grids
- 4.7 Clean transport and mobility
- 4.9 Energy storage
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 13_Climate action

Content:

A full energy and climate solutions toolbox by 2030



37. 37 U_1

2 Quotations:

37.1. 44:1 *The Best Start in Life – a 30% reduction in childhood obesity and significant improvement of parent-...*

Coding:

- 1.2 Environmental and social health determinants
- SDG 3_Good health and well-being for people

Content:

The Best Start in Life – a 30% reduction in childhood obesity and significant improvement of parent-child attachment by 2030

37.2. 44:2 *Reducing obesity and associated co-morbidities, including type 2 diabetes and cardiovascular disease...*

Coding:

- 1.2 Environmental and social health determinants
- 1.3 Non-communicable and rare diseases
- SDG 3_Good health and well-being for people

Content:

Reducing obesity and associated co-morbidities, including type 2 diabetes and cardiovascular diseases, at all ages

38. 38 U_2

2 Quotations:

38.1. 46:1 *Decreasing the proportion of Unvaccinated persons in the European population*

Coding:

- 1.4 Infectious diseases
- SDG 3_Good health and well-being for people

Content:

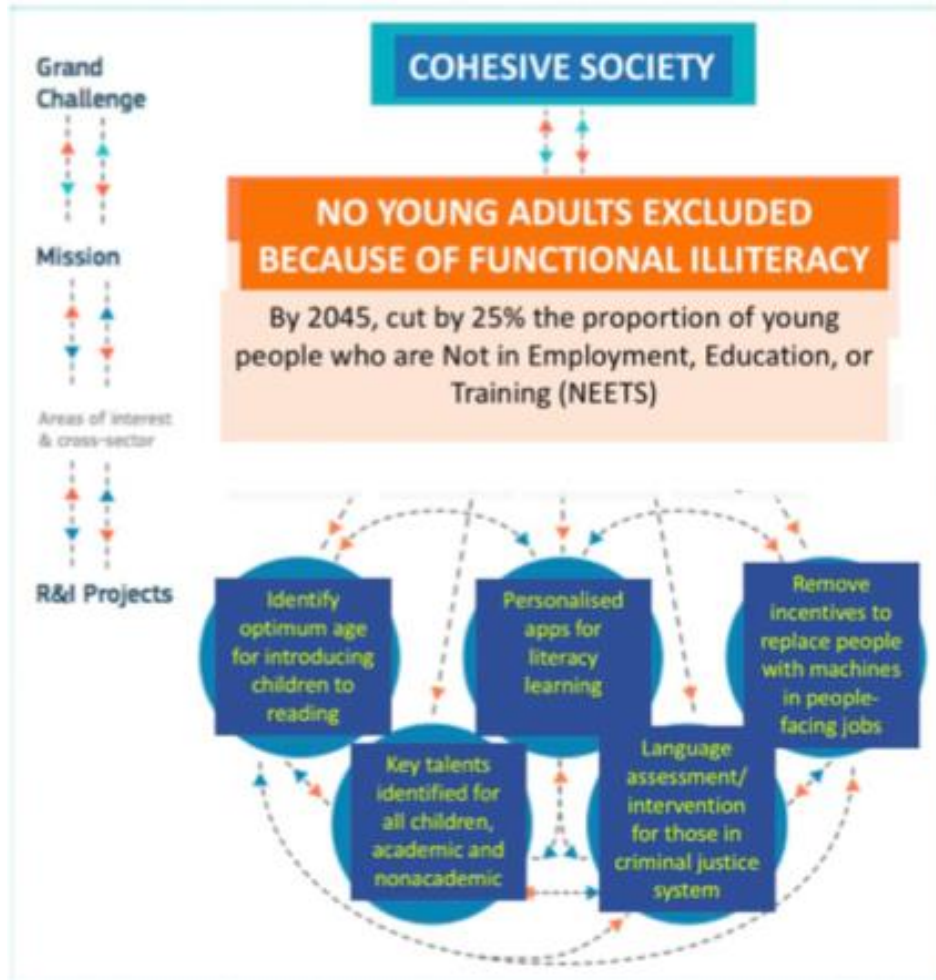
Decreasing the proportion of Unvaccinated persons in the European population

38.2. 📖 46:2 Quotation 46:2

Coding:

- 2.3 Social and economic transformations
- SDG 4_Quality education
- SDG 10_Reducing inequalities

Content:



39. 📖 39 U_3

1 Quotations:

39.1. 📖 47:1 A replacement of fossil-based raw materials and a modernization of the production processes are cruc...

Coding:


- 3.7 Circular industries
- 3.8 Low carbon and clean industry
- 4.2 Energy supply
- 5.6 Bio-based innovation systems
- SDG 7_Affordable and clean energy
- SDG 12_Responsible consumption and production

Content:

A replacement of fossil-based raw materials and a modernization of the production processes are crucial for Europe's vision of a zero-emission society and the global competitiveness of its industry.

40.  40 U_4

1 Quotations:

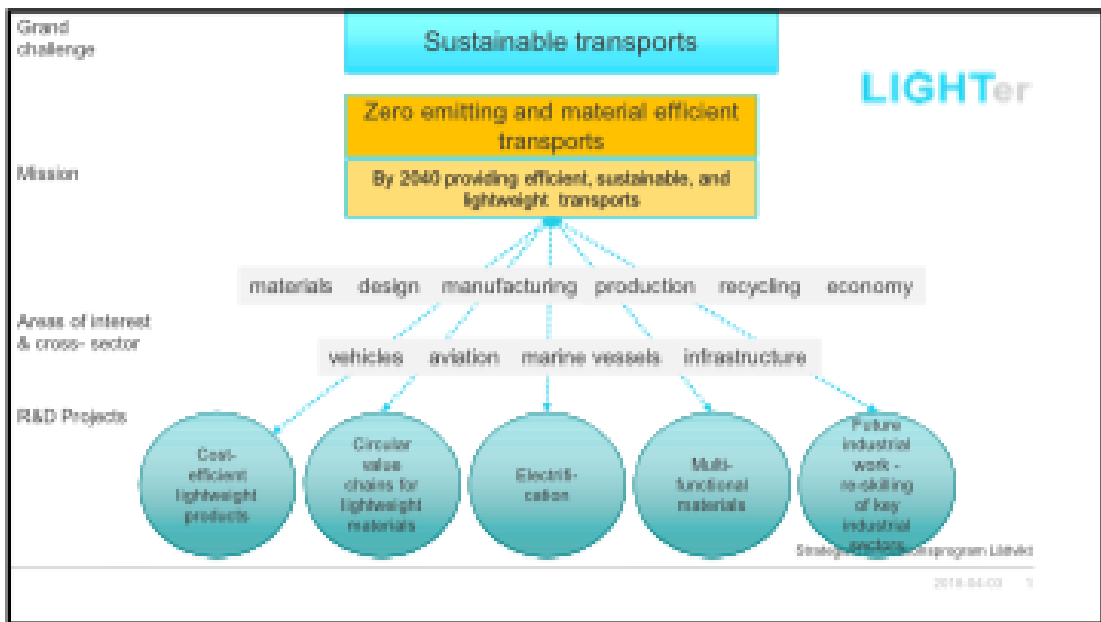
40.1.  49:1 Zero emitting and material efficient transports By 2040 providing efficient, sustainable, and lightw...

Coding:

- 4.7 Clean transport and mobility
- SDG 9_Industry, innovation and infrastructure

Content:

Zero emitting and material efficient transports
By 2040 providing efficient, sustainable, and lightweight transports



41.  41 U_5

1 Quotations:

41.1.  50:1 Building a synthetic cell

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 3.3 Advanced materials
- 4.2 Energy supply
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 3_Good health and well-being for people
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure

Content:

Building a synthetic cell

42.  42 U_6

1 Quotations:

42.1. 📄 53:1 Wild river mission

Coding:

- 4.2 Energy supply
- 5.2 Biodiversity and natural capital
- SDG 6_Clean water and sanitation
- SDG 15_Life on land

Content:

Wild river mission

43. 📄 43 U_7

2 Quotations:

43.1. 📄 54:1 Grabbing to life: in search for alternatives to organ transplantation

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 3.3 Advanced materials
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Grabbing to life: in search for alternatives to organ transplantation

43.2. 📄 54:2 Towards zero animal testing

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 3.3 Advanced materials
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Towards zero animal testing

44. 📄 44 U_8

1 Quotations:

44.1. 📄 55:2 The target is that by 2030 a new global legal regime will be in place that offers globally fair cond...

Coding:

- 2.3 Social and economic transformations
- SDG 10_Reducing inequalities
- SDG 16_Peace, justice and strong institutions
- SDG 17_Partnerships for the Goals

Content:

The target is that by 2030 a new global legal regime will be in place that offers globally fair conditions for economic production and distribution.

45. 📄 45 U_9

1 Quotations:

45.1. 📄 56:1 Understanding the dissemination of antimicrobial resistance (bacteria and genes) in the environment-...

Coding:

- 1.4 Infectious diseases
- SDG 3_Good health and well-being for people

Content:

Understanding the dissemination of antimicrobial resistance (bacteria and genes) in the environment- soil, water (surface, ground, drinking, etc), etc in order to help preserve current/future treatments.

46.  46 U_10**5 Quotations:**


46.1.  *57:1 Zero-waste Raw Materials Circular Economy by 2050*

Coding:

- 3.7 Circular industries
- 5.7 Circular systems
- SDG 12_Responsible consumption and production

Content:

Zero-waste Raw Materials Circular Economy by 2050


46.2.  *57:2 Inclusive and human-centric AI development to increase social trust in the systems and the society*

Coding:

- 2.3 Social and economic transformations
- 3.4 Artificial intelligence and robotics
- SDG 9_Industry, innovation and infrastructure

Content:

Inclusive and human-centric AI development to increase social trust in the systems and the society

46.3.  *57:3 Designing Democracy to Increase Equality and Inclusion, Wellbeing and Business Opportunities by 2030*

Coding:

- 2.1 Democracy
- 2.3 Social and economic transformations
- SDG 9_Industry, innovation and infrastructure
- SDG 10_Reducing inequalities

Content:

Designing Democracy to Increase Equality and Inclusion, Wellbeing and Business Opportunities by 2030


46.4.  *57:4 Smart, Green and Integrated Transport: Zero-Emission Transport Industry by 2035*

Coding:

- 4.7 Clean transport and mobility
- 4.8 Smart mobility
- 5.7 Circular systems
- SDG 11_Sustainable cities and communities

Content:

Smart, Green and Integrated Transport: Zero-Emission Transport Industry by 2035

46.5.  *57:5 Healthy Planet, Healthy People – Freshwater as crosscutter and interconnector*

Coding:

- 5.2 Biodiversity and natural capital
- SDG 6_Clean water and sanitation

Content:

Healthy Planet, Healthy People – Freshwater as crosscutter and interconnector

47.  **47 U_11**

4 Quotations:

47.1.  *59:4 REDUCING CANCER MORTALITY IN EUROPE BY 2/3 BY 2027 THROUGH EARLY DIAGNOSIS AND EFFICIENT TREATMENT*

Coding:

- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

REDUCING CANCER MORTALITY IN EUROPE BY 2/3 BY 2027 THROUGH EARLY DIAGNOSIS AND EFFICIENT TREATMENT

47.2.  *59:5 PROMOTING HEALTHY AGING OF THE EUROPEAN POPULATION, DEVELOPING SUSTAINABLE AND EFFECTIVE LONG-TERM C...*

Coding:

- 1.1 Health throughout the life course
- 1.6 Health care systems
- SDG 3_Good health and well-being for people

Content:

PROMOTING HEALTHY AGING OF THE EUROPEAN POPULATION, DEVELOPING SUSTAINABLE AND EFFECTIVE LONG-TERM CARE PROVISIONS

47.3.  *59:6 ACHIEVING THE ENERGY UNION IN EUROPE BY 2027 TO ENSURE THAT CITIZENS AND COMPANIES HAVE A SAFE, AFFO...*

Coding:

- 4.1 Climate science and solutions
- 4.2 Energy supply
- 4.3 Energy systems and grids
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 13_Climate action

Content:

ACHIEVING THE ENERGY UNION IN EUROPE BY 2027 TO ENSURE THAT CITIZENS AND COMPANIES HAVE A SAFE, AFFORDABLE AND CLIMATE RESPECTFUL ENERGY SUPPLY

47.4.  *59:7 50% OF FOODS CONSUMED IN EUROPE IN 2030 MUST COME FROM A SUSTAINABLE AGRO-FOOD CHAIN*

Coding:


- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 12_Responsible consumption and production

Content:

50% OF FOODS CONSUMED IN EUROPE IN 2030 MUST COME FROM A SUSTAINABLE AGRO-FOOD CHAIN

48.  **48 U_12**

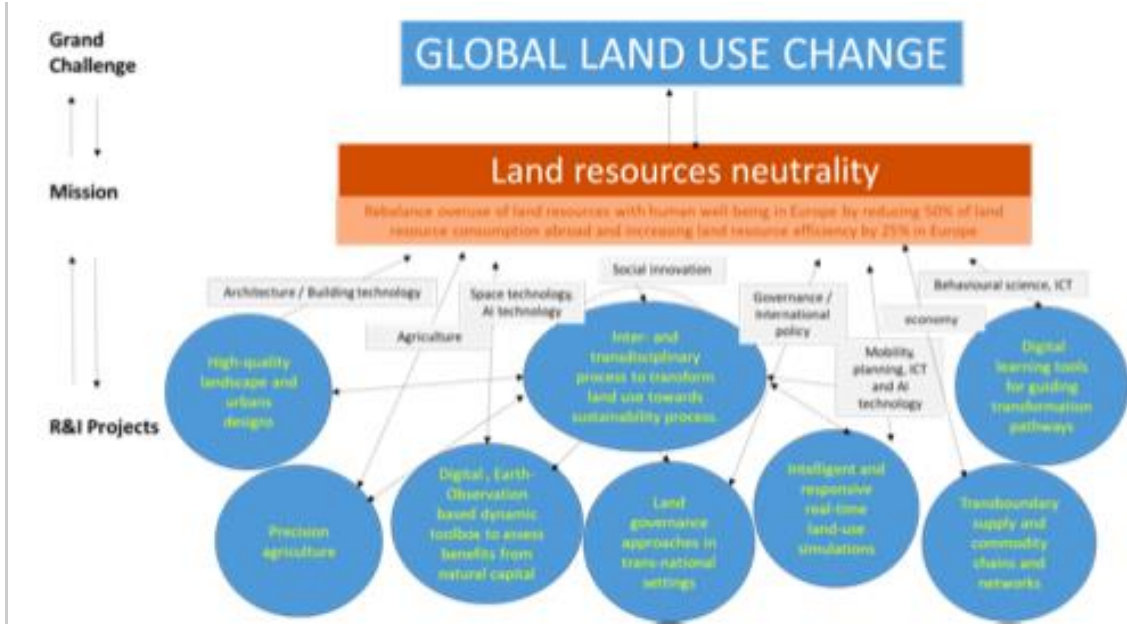
5 Quotations:


48.1.  61:1 Quotation 61:1

Coding:

- 2.3 Social and economic transformations
- 3.2 Digital technologies
- 5.2 Biodiversity and natural capital
- 5.3 Agriculture, forestry and rural areas
- SDG 11_Sustainable cities and communities
- SDG 15_Life on land

Content:




48.2.  61:2 Advance tertiary education in engineering sciences in Sub-Saharan African countries

Coding:

- 2.3 Social and economic transformations
- SDG 1_No poverty
- SDG 4_Quality education

Content:

Advance tertiary education in engineering sciences in Sub-Saharan African countries

48.3.  61:3 the goal of Sustainable Chemical Processes Through Catalysis (SusChem 4.0) is to revolutionize the e...

Coding:

- 3.1 Manufacturing technologies
- SDG 9_Industry, innovation and infrastructure

Content:

the goal of Sustainable Chemical Processes Through Catalysis (SusChem 4.0) is to revolutionize the entire chemical production chain by accelerating the discovery and time-to-market of new catalytic processes that enable the highly flexible (mass-) production of customizable products from abundant and renewable feedstocks.

48.4.  61:4 The EU Mission "Counteracting Climate Change" shall provide the necessary scientific underpinning an...

Coding:

- 4.1 Climate science and solutions
- 5.1 Environmental observation
- SDG 13_Climate action

Content:

The EU Mission “Counteracting Climate Change” shall provide the necessary scientific underpinning and technical evidence to make informed decisions.

48.5.  61:5 *The vision of the truly interdisciplinary EU mission "De-Fossilized Energy Systems" is that of tackl...*

Coding:


- 4.1 Climate science and solutions
- 4.2 Energy supply
- 4.3 Energy systems and grids
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 13_Climate action

Content:

The vision of the truly interdisciplinary EU mission "De-Fossilized Energy Systems" is that of tackling in a holistic, systemic and coordinated manner the science and technology of future de-fossilized, net-zero-emissions energy systems and of the services that they will provide (to the industrial, residential, service, and mobility sectors), as well as of designing scenarios of a net-zero-emission society to guide the current climate change mitigation and adaptation measures.

49.  49 U_13

5 Quotations:


49.1.  63:7 *Restoring the cultural authority of science*

Coding:

- 2.2 Cultural heritage

Content:

Restoring the cultural authority of science

49.2.  63:8 *Leaving a sustainable city in a sustainable landscape to our children*

Coding:

- 3.7 Circular industries
- 3.8 Low carbon and clean industry
- 4.1 Climate science and solutions
- 4.2 Energy supply
- 4.5 Communities and cities
- 5.5 Food systems
- 5.7 Circular systems
- SDG 2_Zero hunger
- SDG 7_Affordable and clean energy
- SDG 11_Sustainable cities and communities
- SDG 12_Responsible consumption and production
- SDG 13_Climate action

Content:

Leaving a sustainable city in a sustainable landscape to our children

49.3.  63:9 *Eradicating Europe’s digital divides*


Coding:

- 2.1 Democracy
- 2.3 Social and economic transformations

- 3.2 Digital technologies
 - SDG 4_Quality education
 - SDG 8_Decent work and economic growth
 - SDG 9_Industry, innovation and infrastructure
 - SDG 10_Reducing inequalities
 - SDG 16_Peace, justice and strong institutions

Content:

Eradicating Europe's digital divides


49.4.  63:10 Personalised prevention, precision medicine and healthy ageing: two more healthy years for all EU ci...

Coding:

- 1.1 Health throughout the life course
- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
 - SDG 3_Good health and well-being for people
 - SDG 9_Industry, innovation and infrastructure

Content:

Personalised prevention, precision medicine and healthy ageing: two more healthy years for all EU citizens by 2025

49.5.  63:11 Take arms against anti-microbial resistance (AMR): halving the number of infections and extra deaths...

Coding:

- 1.4 Infectious diseases
- 1.5 Tools, technologies and digital solutions for health
 - SDG 3_Good health and well-being for people
 - SDG 9_Industry, innovation and infrastructure

Content:

Take arms against anti-microbial resistance (AMR): halving the number of infections and extra deaths by 2027

50.  50 U_14

1 Quotations:

50.1.  65:1 POLYMER FIRE RETARDANCE UPDATE TO CURRENT TECHNOLOGY SCENARIO

Coding:


- 3.3 Advanced materials
 - SDG 9_Industry, innovation and infrastructure

Content:

POLYMER FIRE RETARDANCE UPDATE TO CURRENT TECHNOLOGY SCENARIO

51.  51 U_15

4 Quotations:


51.1.  66:1 Stop the demographic and economic decline in 100 European rural regions (LAU1 or equivalent) through...

Coding:

- 2.3 Social and economic transformations
- 5.6 Bio-based innovation systems
 - SDG 2_Zero hunger
 - SDG 8_Decent work and economic growth

Content:

Stop the demographic and economic decline in 100 European rural regions (LAU1 or equivalent) through a territorialized bioeconomy.


51.2.  66:2 *Adapt hydraulic infrastructures to the extreme phenomena associated with climate change*

Coding:

- 4.1 Climate science and solutions
- 5.2 Biodiversity and natural capital
- SDG 6_Clean water and sanitation
- SDG 13_Climate action

Content:

Adapt hydraulic infrastructures to the extreme phenomena associated with climate change

51.3.  66:3 *Reduce cancer mortality by 75%.*

Coding:

- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Reduce cancer mortality by 75%.

51.4.  66:4 *100 Gbits of information accessible to 90% of the European population in a sustainable way.*

Coding:


- 2.3 Social and economic transformations
- 3.2 Digital technologies
- SDG 4_Quality education
- SDG 8_Decent work and economic growth
- SDG 10_Reducing inequalities

Content:

100 Gbits of information accessible to 90% of the European population in a sustainable way.

52.  52 U_16

6 Quotations:

52.1.  67:1 *Healthy European Landscapes: restoring biodiversity in coexistence with sustainable agriculture*

Coding:

- 5.2 Biodiversity and natural capital
- 5.3 Agriculture, forestry and rural areas
- SDG 2_Zero hunger
- SDG 15_Life on land

Content:

Healthy European Landscapes: restoring biodiversity in coexistence with sustainable agriculture

52.2.  67:2 *Safe self-sovereignty and full control of personal data*

Coding:

- 2.1 Democracy
- 2.5 Protection and security
- 2.6 Cybersecurity

- 3.2 Digital technologies
 - SDG 16_Peace, justice and strong institutions

Content:

Safe self-sovereignty and full control of personal data

52.3. 🗨️ 67:3 *Unravelling the nature of space and time*

Coding:

- 3.9 Space
 - SDG 9_Industry, innovation and infrastructure

Content:

Unravelling the nature of space and time

52.4. 🗨️ 67:4 *Human Cell Atlas*

Coding:

- 1.5 Tools, technologies and digital solutions for health
 - SDG 3_Good health and well-being for people
 - SDG 9_Industry, innovation and infrastructure

Content:

Human Cell Atlas

52.5. 🗨️ 67:5 *Green ICT: data processing and storage as energy-efficient as the brain*

Coding:

- 3.2 Digital technologies
- 4.9 Energy storage
 - SDG 7_Affordable and clean energy
 - SDG 9_Industry, innovation and infrastructure

Content:

Green ICT: data processing and storage as energy-efficient as the brain

52.6. 🗨️ 67:6 *A Happy and Healthy Europe by 2040*

Coding:

- 1.1 Health throughout the life course
- 1.2 Environmental and social health determinants
 - SDG 3_Good health and well-being for people

Content:

A Happy and Healthy Europe by 2040

53. 📄 53 U_17

3 Quotations:

53.1. 🗨️ 68:1 *Quotation 68:1*

Coding:

- 2.1 Democracy
 - SDG 16_Peace, justice and strong institutions

Content:

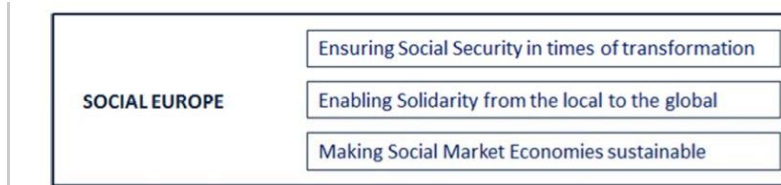


53.2. 📄 68:2 Quotation 68:2

Coding:

- 2.3 Social and economic transformations
 - SDG 8_Decent work and economic growth
 - SDG 10_Reducing inequalities
 - SDG 11_Sustainable cities and communities

Content:

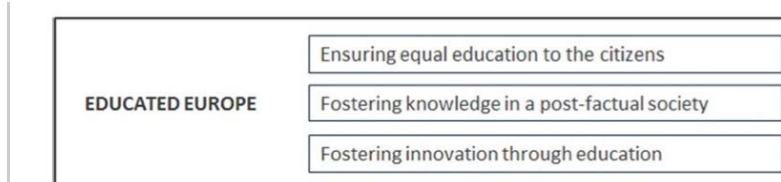


53.3. 📄 68:3 Quotation 68:3

Coding:

- 2.3 Social and economic transformations
 - SDG 4_Quality education

Content:



54. 📄 54 U_18

1 Quotations:

54.1. 📄 69:1 PREVENTING BLINDNESS CAUSED BY AGE-RELATED MACULAR DEGENERATION

Coding:

- 1.1 Health throughout the life course
- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
 - SDG 3_Good health and well-being for people
 - SDG 9_Industry, innovation and infrastructure

Content:

PREVENTING BLINDNESS CAUSED BY AGE-RELATED MACULAR DEGENERATION

55. 📄 55 U_19

7 Quotations:

55.1. 📄 70:1 Global Contestations

Coding:

- 2.1 Democracy
- 2.3 Social and economic transformations
 - SDG 10_Reducing inequalities
 - SDG 16_Peace, justice and strong institutions
 - SDG 17_Partnerships for the Goals

Content:

Global Contestations

55.2. 🗨️ 70:3 By 2030, AI and data-driven decision making routines is informed by its possible implications on soc...

Coding:

- 2.3 Social and economic transformations
- 3.4 Artificial intelligence and robotics
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

By 2030, AI and data-driven decision making routines is informed by its possible implications on society and the fundamental rights and public values democratic societies in the EU are built on. Very concretely that means that all major technology-development projects in this area need to include from the very beginning of the development cycle an accompanying 'Social impact, usage & public values' work package.

55.3. 🗨️ 70:4 Circular Bio- based- economy: The challenge is a transition away from fossil resources and to a renewa...

Coding:

- 5.6 Bio-based innovation systems
- 5.7 Circular systems
- SDG 2_Zero hunger
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities
- SDG 12_Responsible consumption and production

Content:

Circular Bio- based- economy: The challenge is a transition away from fossil resources and to a renewable, bio based, circular economy.

55.4. 🗨️ 70:5 Circular Bio-Based economy Feeding the world. Preventing food waste.

Coding:

- 5.5 Food systems
- 5.6 Bio-based innovation systems
- SDG 2_Zero hunger
- SDG 12_Responsible consumption and production

Content:

Circular Bio-Based economy
Feeding the world. Preventing food waste.

55.5. 🗨️ 70:6 Mental health in big cities

Coding:

- 1.2 Environmental and social health determinants
- 1.3 Non-communicable and rare diseases
- 4.5 Communities and cities
- SDG 3_Good health and well-being for people
- SDG 11_Sustainable cities and communities

Content:

Mental health in big cities

55.6. 🗨️ 70:7 HEALTHY CHILD DEVELOPMENT

Coding:

- 1.1 Health throughout the life course
- 1.2 Environmental and social health determinants
- SDG 3_Good health and well-being for people

Content:

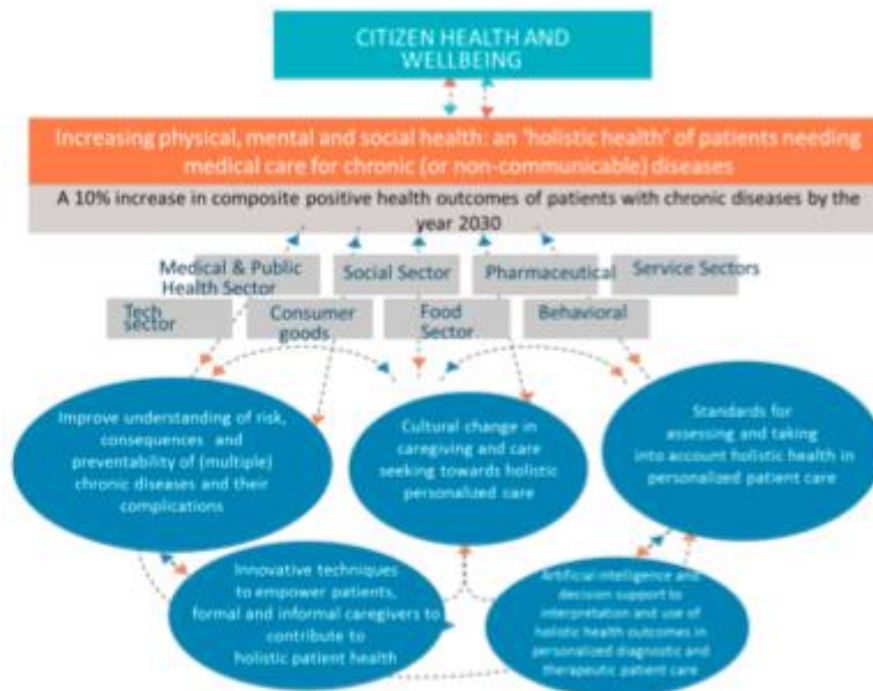
HEALTHY CHILD DEVELOPMENT

55.7. 📖 70:9 Quotation 70:9

Coding:

- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:



56. 📖 56 U_20

1 Quotations:

56.1. 📖 71:1 The ocean provides 10 % of the food and feed by 2027

Coding:

- 5.4 Sea and oceans
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 14_Life below water

Content:

The ocean provides 10 % of the food and feed by 2027

57. 📖 57 U_21

20 Quotations:


57.1. 📖 73:3 Increasing healthy life years of Europeans by year 2050

Coding:

- 1.1 Health throughout the life course
- 1.2 Environmental and social health determinants
- 1.3 Non-communicable and rare diseases
- 1.4 Infectious diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people

Content:

Increasing healthy life years of Europeans by year 2050


57.2.  73:4 *Understanding and enhancing the brain by 2030*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 3.2 Digital technologies
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Understanding and enhancing the brain by 2030


57.3.  73:5 *Providing more novel health information by 2030*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 3.2 Digital technologies
- 3.6 High performance computing and Big Data
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Providing more novel health information by 2030

57.4.  73:6 *Zero-emission power generation by 2050: starting with sustainable cities by 2030*

Coding:

- 3.8 Low carbon and clean industry
- 4.2 Energy supply
- 4.5 Communities and cities
- SDG 7_Affordable and clean energy
- SDG 11_Sustainable cities and communities

Content:

Zero-emission power generation by 2050: starting with sustainable cities by 2030

57.5.  73:7 *Creating a zero-emission transport industry by 2035*

Coding:

- 3.7 Circular industries
- 4.7 Clean transport and mobility
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

Creating a zero-emission transport industry by 2035

57.6.  73:8 *CO2 as a raw material – negative gas house emissions*

Coding:

- 3.7 Circular industries
- 4.2 Energy supply
- 5.7 Circular systems
- SDG 7_Affordable and clean energy
- SDG 12_Responsible consumption and production

Content:

CO2 as a raw material – negative gas house emissions

57.7. 📄 73:9 *Global energy system, industrial process and emission modeling in country and hourly basis*

Coding:

- 3.8 Low carbon and clean industry
- 4.2 Energy supply
- 4.7 Clean transport and mobility
- 5.6 Bio-based innovation systems
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure

Content:

Global energy system, industrial process and emission modeling in country and hourly basis

57.8. 📄 73:10 *Systemic sustainable wellbeing of people and societies by 2030*

Coding:

- 1.1 Health throughout the life course
- 1.2 Environmental and social health determinants
- SDG 3_Good health and well-being for people

Content:

Systemic sustainable wellbeing of people and societies by 2030

57.9. 📄 73:11 *Establishing the Global Earth Observatory by 2030*

Coding:

- 4.1 Climate science and solutions
- 5.1 Environmental observation
- SDG 13_Climate action

Content:

Establishing the Global Earth Observatory by 2030

57.10. 📄 73:12 *Free the environment of nano- and microplastics by 2035*

Coding:

- 3.7 Circular industries
- 5.6 Bio-based innovation systems
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

Free the environment of nano- and microplastics by 2035

57.11. 📄 73:13 *Creating sustainable Future Food Systems by 2035*

Coding:

- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 2_Zero hunger

Content:

Creating sustainable Future Food Systems by 2035

57.12. 📄 73:14 *Getting into the loop - 50% reduction of waste by 2030 –from waste to resources*

Coding:

- 3.7 Circular industries
- 5.6 Bio-based innovation systems

- 5.7 Circular systems
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

Getting into the loop - 50% reduction of waste by 2030 –from waste to resources

57.13. 🇪🇺 73:15 *Inclusive and human-centric AI development to increase social trust in the systems and the society*

Coding:

- 2.3 Social and economic transformations
- 3.4 Artificial intelligence and robotics
- SDG 8_Decent work and economic growth
- SDG 9_Industry, innovation and infrastructure

Content:

Inclusive and human-centric AI development to increase social trust in the systems and the society

57.14. 🇪🇺 73:16 *Energy internet – on-line management of system of systems*

Coding:

- 3.5 Next generation Internet
- 4.2 Energy supply
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure

Content:

Energy internet – on-line management of system of systems

57.15. 🇪🇺 73:17 *Placing Europe at the leading edge of beyond 5G systems by 2030*

Coding:

- 3.5 Next generation Internet
- SDG 9_Industry, innovation and infrastructure

Content:

Placing Europe at the leading edge of beyond 5G systems by 2030

57.16. 🇪🇺 73:18 *Designing democracy to increase equality and inclusion, wellbeing and business opportunities by 2030*

Coding:

- 2.1 Democracy
- 2.3 Social and economic transformations
- SDG 8_Decent work and economic growth
- SDG 10_Reducing inequalities
- SDG 16_Peace, justice and strong institutions

Content:

Designing democracy to increase equality and inclusion, wellbeing and business opportunities by 2030

57.17. 🇪🇺 73:19 *New skills for new era – Europeans as trailblazers by 2030*

Coding:

- 2.3 Social and economic transformations
- 3.2 Digital technologies
- SDG 4_Quality education
- SDG 8_Decent work and economic growth

Content:

New skills for new era – Europeans as trailblazers by 2030


57.18.  73:20 Solving crises, adapting to societal change

Coding:

- 2.3 Social and economic transformations
- 2.4 Disaster-resilient societies
- SDG 16_Peace, justice and strong institutions

Content:

Solving crises, adapting to societal change


57.19.  73:21 Creating sustainable business and governance models that continue to support welfare states

Coding:

- 2.3 Social and economic transformations
- 4.5 Communities and cities
- SDG 8_Decent work and economic growth
- SDG 11_Sustainable cities and communities

Content:

Creating sustainable business and governance models that continue to support welfare states

57.20.  73:22 Facing the complexity of borders, mobilities and cultural encounters

Coding:

- 2.2 Cultural heritage
- 2.3 Social and economic transformations
- SDG 11_Sustainable cities and communities
- SDG 16_Peace, justice and strong institutions

Content:

Facing the complexity of borders, mobilities and cultural encounters

58.  58 U_22

1 Quotations:

58.1.  75:1 Let's Make Sahara Green Again

Coding:


- 4.1 Climate science and solutions
- 5.2 Biodiversity and natural capital
- 5.3 Agriculture, forestry and rural areas
- SDG 13_Climate action
- SDG 15_Life on land

Content:

Let's Make Sahara Green Again

59.  59 U_23

5 Quotations:

59.1.  76:1 Food for a healthy life Food production facing climate changes
Introducing circularity into the...


Coding:

- 1.2 Environmental and social health determinants
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems

- 5.6 Bio-based innovation systems
- 5.7 Circular systems
- SDG 2_Zero hunger
- SDG 3_Good health and well-being for people
- SDG 12_Responsible consumption and production

Content:

- Food for a healthy life
- Food production facing climate changes
 - Introducing circularity into the food value chains to reach zero waste
 - Non-food production from agriculture
 - Food security (safe and healthy) for all people
 - Innovation in local productions for a global market
 - Remote management for the value chains in agrifood


59.2.  76:2 *New and smart materials from sustainable sources:* *New generation material: superatoms, graphene, n...*

Coding:

- 3.3 Advanced materials
- 3.7 Circular industries
- 5.2 Biodiversity and natural capital
- 5.6 Bio-based innovation systems
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

- New and smart materials from sustainable sources:
- New generation material: superatoms, graphene, nanostructures
 - New smart materials for energy generation
 - Critical raw materials scarcity - innovative solution
 - (Hazardous) Waste reuse with a circular economy approach
 - New material from agrifood industry
 - Materials modelling

59.3.  76:3 *Quotation 76:3*

Coding:

- 4.2 Energy supply
- 4.3 Energy systems and grids
- 4.5 Communities and cities
- 4.7 Clean transport and mobility
- 4.9 Energy storage
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

MISSION - Energy and Mobility:

- High-efficiency energy transition toward a carbon-free model for European cities;
- Towards complete European energy self-sufficiency through clean, distributed technologies and renewable sources;
- New smart materials for the storage and production of clean, sustainable energy;
- Energy/Environment: CO₂, gases and noise footprints slash by developing new propulsion architectures, light composite structures, improved aerodynamics and more electrical on-board energy and actuation;
- Safety in vehicle mobility: exposure to near-crash situations, crash prevention, and crash severity reduction;
- Ultra-low power sense-compute-actuate distributed systems for smart interconnected mobility.

59.4.  76:4 *HEALTH Disease Prevention & Treatment Innovative and technological health care solutions for disease...*

Coding:

- 1.1 Health throughout the life course
- 1.2 Environmental and social health determinants
- 1.3 Non-communicable and rare diseases
- 1.4 Infectious diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

HEALTH Disease Prevention & Treatment
 Innovative and technological health care solutions for diseases having high societal impact (Neurodegenerative, Rare and Infectious Diseases).

Prevention:

Social/Communication for disease awareness/age and language (speech loss);

Healthy Diet as preventive medicine;

Environmental & Physiological monitoring for health & and safety.

Treatment: Biomarker identification, early diagnosis and advanced bio-imaging for pre-/clinical application by biosensor technologies and big data analysis;

Precision/Personalized medicine & nanomedicines;

Regenerative & genomic medicine;

Biomedical devices & Biomaterials.

59.5. 🗨️ 76:5 *A more resilient European society: ☐ Smart solutions to bridge the gap between dynamic technological...*

Coding:

- 1.2 Environmental and social health determinants
- 2.2 Cultural heritage
- 2.3 Social and economic transformations
- 2.6 Cybersecurity
- 3.2 Digital technologies
- SDG 3_Good health and well-being for people
- SDG 4_Quality education
- SDG 8_Decent work and economic growth
- SDG 16_Peace, justice and strong institutions

Content:

A more resilient European society:

☐ Smart solutions to bridge the gap between dynamic technological development and its social and political acceptance.

☐ Industry 4.0 tailored education programmes to cope with the radically changing employment situation and strengthen new workers' competencies.

☐ Demographic sustainability (in Europe) - Measures to preserve/increase fertility/fecundity

☐ The transparent human being - strategies against the marketing of humans by Big Data

☐ The role of language and its public use.

60. 📄 60 U_24

1 Quotations:

60.1. 🗨️ 77:1 *Interoperability across EU social-healthcare systems*

Coding:


- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Interoperability across EU social-healthcare systems

61. 📄 61 U_25

3 Quotations:


61.1.  78:1 To reduce food insecurity, improve nutrition and increase environmental sustainability by 2030,

Coding:

- 1.2 Environmental and social health determinants
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- 5.7 Circular systems
- SDG 2_Zero hunger

Content:

To reduce food insecurity, improve nutrition and increase environmental sustainability by 2030,


61.2.  78:2 To decrease the burden of age-related multi-morbidity in order to reduce the average number of years...

Coding:

- 1.1 Health throughout the life course
- 1.3 Non-communicable and rare diseases
- SDG 3_Good health and well-being for people

Content:

To decrease the burden of age-related multi-morbidity in order to reduce the average number of years spent with multiple diseases by two years by 2030

61.3.  78:3 To provide sustainable and universal healthcare for an ageing population through the reduction, refi...

Coding:


- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people

Content:

To provide sustainable and universal healthcare for an ageing population through the reduction, refinement, and replacement of animal and human regulatory experimentation with computer modelling & simulation.

62. 62 U_26

1 Quotations:

62.1.  79:1 Research and innovation to improve Indoor Environment Quality for a healthy and comfortable living.

Coding:


- 3.3 Advanced materials
- 4.4 Buildings and industrial facilities in energy transition
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

Research and innovation to improve Indoor Environment Quality for a healthy and comfortable living.

63. 63 U_27

1 Quotations:

63.1.  80:1 Resilient Youth should be defined as a societal challenge or mission

Coding:

- 1.1 Health throughout the life course
- 2.5 Protection and security
- SDG 3_Good health and well-being for people
- SDG 10_Reducing inequalities
- SDG 16_Peace, justice and strong institutions

Content:

Resilient Youth should be defined as a societal challenge or mission

64.  64 RO_1

1 Quotations:

- 64.1.  *81:1 The mission is to build a toolkit of high-yielding, low-input, stress-tolerant, disease-resistant so...*

Coding:


- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 2_Zero hunger

Content:

The mission is to build a toolkit of high-yielding, low-input, stress-tolerant, disease-resistant sources of plant protein, suited to widely varying climates, which provide balanced EAAs, tailored to diverse food cultures and integrated with dietary research.

65.  65 RO_2

1 Quotations:

- 65.1.  *82:1 mission is to characterise all exoplanets within 100 light years of Earth, and answer the question:...*

Coding:


- 3.9 Space
- SDG 9_Industry, innovation and infrastructure

Content:

mission is to characterise all exoplanets within 100 light years of Earth, and answer the question: is there life elsewhere in the Universe?

66.  66 RO_3

1 Quotations:

- 66.1.  *83:1 Climate change impacts along the agrofood chain: Enduser relevant research for food security*

Coding:

- 4.1 Climate science and solutions
- 5.1 Environmental observation
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 13_Climate action

Content:

Climate change impacts along the agrofood chain: Enduser relevant research for food security

67.  67 RO_4

1 Quotations:

- 67.1.  *86:1 TOWARDS A WORLD WITHOUT ANTIMICROBIAL RESISTANCE*

Coding:

- 1.4 Infectious diseases
- 1.5 Tools, technologies and digital solutions for health
 - SDG 3_Good health and well-being for people
 - SDG 9_Industry, innovation and infrastructure

Content:

TOWARDS A WORLD WITHOUT ANTIMICROBIAL RESISTANCE

68.  68 RO_5**2 Quotations:**


68.1.  87:1 *Foster the strong position of Europe in quantum technologies*

Coding:

- 3.6 High performance computing and Big Data
 - SDG 9_Industry, innovation and infrastructure

Content:

Foster the strong position of Europe in quantum technologies

68.2.  87:3 *Towards a holistic appraisal of the human heritage in line with E-RIHS vision through the aggregatio...*


Coding:

- 2.2 Cultural heritage
- 3.2 Digital technologies
- 3.6 High performance computing and Big Data
 - SDG 9_Industry, innovation and infrastructure

Content:

Towards a holistic appraisal of the human heritage in line with E-RIHS vision through the aggregation of structured and unstructured and heterogeneous data in the Arts and Humanities

69.  69 RO_6**3 Quotations:**

69.1.  88:1 *One-shot vaccines for multiple diseases (for all populations) with life-long efficacy for 2030*

Coding:

- 1.1 Health throughout the life course
- 1.4 Infectious diseases
 - SDG 3_Good health and well-being for people

Content:

One-shot vaccines for multiple diseases (for all populations) with life-long efficacy for 2030


69.2.  88:2 *Moon-shot on Antimicrobial Resistance*

Coding:

- 1.4 Infectious diseases
 - SDG 3_Good health and well-being for people

Content:

Moon-shot on Antimicrobial Resistance

69.3.  88:3 *Car free and Healthier cities by 2040*

Coding:


- 1.2 Environmental and social health determinants
- 1.3 Non-communicable and rare diseases
- 4.5 Communities and cities
- 4.7 Clean transport and mobility
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

Car free and Healthier cities by 2040

70.  70 RO_7

1 Quotations:


70.1.  89:1 *A mission on cancer*

Coding:


- 1.3 Non-communicable and rare diseases
- SDG 3_Good health and well-being for people

Content:

A mission on cancer

71.  71 RO_8

5 Quotations:

71.1.  90:6 *A carbon-neutral Europe (green mobility, batteries, fuel cells, renewable fuels, bioenergy, electric...*

Coding:

- 3.2 Digital technologies
- 4.2 Energy supply
- 4.7 Clean transport and mobility
- 4.8 Smart mobility
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

A carbon-neutral Europe (green mobility, batteries, fuel cells, renewable fuels, bioenergy, electric & hybrid powertrains, energy harvesting) available, convenient, personalized, digitized, energy efficient and seamless (intelligent transport systems, autonomous vehicles, block chain, integrated banking system etc.).


71.2.  90:7 *By 2027, there will be European flexible, safe and secure, digitized and operator- friendly factorie...*

Coding:

- 3.1 Manufacturing technologies
- 3.3 Advanced materials
- 3.4 Artificial intelligence and robotics
- 3.7 Circular industries
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

By 2027, there will be European flexible, safe and secure, digitized and operator- friendly factories that can be set up easily (plug and play robotics, artificial intelligence, IoT, additive manufacturing, intelligent logistics and supply chain systems, circular economy, etc.).


71.3.  90:8 *Creation by 2025 of an Europe-based digital platform to fully control food supply in terms of qualit...*

Coding:

- 3.2 Digital technologies
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 9_Industry, innovation and infrastructure

Content:

Creation by 2025 of an Europe-based digital platform to fully control food supply in terms of quality, environmental impact, origin and traceability, etc. => inform citizens on the circuit "from field to fork".


71.4.  90:9 The EU has the most sovereign computers and secured cyber-systems and internet by 2030

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 2.6 Cybersecurity
- 3.5 Next generation Internet
- 3.6 High performance computing and Big Data
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

The EU has the most sovereign computers and secured cyber-systems and internet by 2030

71.5.  90:10 By 2030 health-tech for citizen health, care and wellbeing are EU sovereign technologies.

Coding:

- 1.1 Health throughout the life course
- 1.3 Non-communicable and rare diseases
- 1.4 Infectious diseases
- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

By 2030 health-tech for citizen health, care and wellbeing are EU sovereign technologies.

72. 72 RO_9

1 Quotations:

72.1.  91:1 An Earth free of nuclear waste

Coding:


- 3.7 Circular industries
- 4.2 Energy supply
- SDG 7_Affordable and clean energy
- SDG 12_Responsible consumption and production

Content:

An Earth free of nuclear waste

73. 73 RO_10

3 Quotations:

73.1.  92:1 by 2030 have increased multinational response to the early identification and rapid containment of i...

Coding:

- 1.4 Infectious diseases
- SDG 3_Good health and well-being for people

Content:

by 2030 have increased multinational response to the early identification and rapid containment of infectious disease outbreaks by 20%.

73.2. 🇪🇺 92:2 by 2030 to have equalized the burden of CVD between sectors of the European population and stabilize...

Coding:

- 1.1 Health throughout the life course
- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

by 2030 to have equalized the burden of CVD between sectors of the European population and stabilized at a minimum, and at an optimum reduced, the average burden of CVD in the face of an aging population.

73.3. 🇪🇺 92:3 by 2030 to have increased health outcomes and economic prosperity through improved sleep.

Coding:

- 1.2 Environmental and social health determinants
- 1.3 Non-communicable and rare diseases
- SDG 3_Good health and well-being for people
- SDG 8_Decent work and economic growth

Content:

by 2030 to have increased health outcomes and economic prosperity through improved sleep.

74. 🇷🇴 74 RO_11

1 Quotations:

74.1. 🇪🇺 93:1 Promoting cardiovascular health through prevention of atherosclerosis in an aging Europe.

Coding:

- 1.1 Health throughout the life course
- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Promoting cardiovascular health through prevention of atherosclerosis in an aging Europe.

75. 🇷🇴 75 RO_12

24 Quotations:

75.1. 🇪🇺 94:2 One of the crucial challenges of the European policies is the consolidation of the welfare state. Fo...

Coding:

- 2.3 Social and economic transformations
- SDG 4_Quality education

- SDG 8_Decent work and economic growth
- SDG 10_Reducing inequalities

Content:

One of the crucial challenges of the European policies is the consolidation of the welfare state. For this reason, it is essential to study phenomena such as aging, childhood and education, leisure, tourism, etc., from the perspective of different sciences, especially including the Humanities and Social Sciences

75.2. ☰ 94:3 *the complex societal challenges that we are facing today cannot be explained by physical, environmen...*

Coding:

- 2.1 Democracy
- 2.2 Cultural heritage
- SDG 16_Peace, justice and strong institutions

Content:

the complex societal challenges that we are facing today cannot be explained by physical, environmental and biological causes alone; humans play a central role. Today more than ever it is essential to study the past to face the present.

75.3. ☰ 94:4 *The research on the social and economic repercussions of global change, under its multiple aspects,...*

Coding:

- 2.3 Social and economic transformations
- SDG 11_Sustainable cities and communities

Content:

The research on the social and economic repercussions of global change, under its multiple aspects, is an essential task. The analysis of migratory movements, policies of exploitation of resources, use of raw materials, development of transportation systems, habitability of cities, rural life and the consequences of depopulation, new human relations arising from population movements and globalization (slave traffic, child labour, discrimination based on gender, religion, race or age). This mission cannot be addressed either if it is not from a clearly transversal and multidisciplinary approach.

75.4. ☰ 94:5 *The fundamental instrument of the human being is language, as a distinctive feature over other speci...*

Coding:

- 2.2 Cultural heritage

Content:

The fundamental instrument of the human being is language, as a distinctive feature over other species. Language is the basis of thought and knowledge. The study of language and communication can cover all the dimensions of the social fact, and affects such relevant issues today as language and national identity, language and ideology, languages for science and communication (bilingualism, plurilingualism), pathologies of language, language as forensic science, processing of natural language and its application to new technologies, language and Digital Humanities, etc.

75.5. ☰ 94:6 *In any research project or in any innovation process, the social consequences related to ethical and...*

Coding:

- 2.2 Cultural heritage

Content:

In any research project or in any innovation process, the social consequences related to ethical and cultural aspects (motivated by customs, traditions, ideologies, religions, etc.) are fundamental.

75.6.  94:7 *Generation of new tools to combat antimicrobial resistance*

Coding:

- 1.4 Infectious diseases
- 1.5 Tools, technologies and digital solutions for health
 - SDG 3_Good health and well-being for people
 - SDG 9_Industry, innovation and infrastructure

Content:

Generation of new tools to combat antimicrobial resistance


75.7.  94:8 *Personalized medicine in rare disease*

Coding:

- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
 - SDG 3_Good health and well-being for people
 - SDG 9_Industry, innovation and infrastructure

Content:

Personalized medicine in rare disease

75.8.  94:9 *New generation of drugs for the treatment of neurodegenerative diseases*

Coding:

- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
 - SDG 3_Good health and well-being for people
 - SDG 9_Industry, innovation and infrastructure

Content:

New generation of drugs for the treatment of neurodegenerative diseases


75.9.  94:10 *Understanding the development of chronic diseases*

Coding:

- 1.3 Non-communicable and rare diseases
- SDG 3_Good health and well-being for people

Content:

Understanding the development of chronic diseases


75.10.  94:11 *Enhanced immunotherapy against cancer, autoimmunity, infection and other diseases*

Coding:

- 1.3 Non-communicable and rare diseases
- 1.4 Infectious diseases
- 1.5 Tools, technologies and digital solutions for health
 - SDG 3_Good health and well-being for people
 - SDG 9_Industry, innovation and infrastructure

Content:

Enhanced immunotherapy against cancer, autoimmunity, infection and other diseases

75.11.  94:12 *Green Chemistry to reach the great challenge of energy saving and environmental 4 preservation*

Coding:

- 3.8 Low carbon and clean industry
- 5.6 Bio-based innovation systems
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

Green Chemistry to reach the great challenge of energy saving and environmental 4 preservation

75.12. ☰ 94:13 *Bio-based Economy to reach the great challenge of Sustainability*

Coding:

- 3.8 Low carbon and clean industry
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- 5.6 Bio-based innovation systems
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

Bio-based Economy to reach the great challenge of Sustainability

75.13. ☰ 94:14 *A global understanding of the Universe (anticipating the picture of the Universe by 2040)*

Coding:

- 3.6 High performance computing and Big Data
- 3.9 Space
- SDG 9_Industry, innovation and infrastructure

Content:

A global understanding of the Universe (anticipating the picture of the Universe by 2040)

75.14. ☰ 94:15 *Reachable nanomedicine (spreading the use of nanomedicine for citizens in the next decade)*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 3.3 Advanced materials
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Reachable nanomedicine (spreading the use of nanomedicine for citizens in the next decade)

75.15. ☰ 94:16 *Connecting Europe using Quantum Technologies (enabling Europe to lead the second quantum revolution...*

Coding:

- 3.6 High performance computing and Big Data
- SDG 9_Industry, innovation and infrastructure

Content:

Connecting Europe using Quantum Technologies (enabling Europe to lead the second quantum revolution in the next decade)

75.16. ☰ 94:17 *Towards an energetically clean Europe (Increasing then use of clean energy in the next decade)*

Coding:

- 4.2 Energy supply
- SDG 7_Affordable and clean energy

Content:

Towards an energetically clean Europe (Increasing then use of clean energy in the next decade)

75.17. 🗨️ 94:18 *Zero-waste cities or advanced waste handling processes (50% reduction of landfill waste in all Europ...*

Coding:

- 3.4 Artificial intelligence and robotics
- 3.7 Circular industries
- 5.7 Circular systems
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

Zero-waste cities or advanced waste handling processes (50% reduction of landfill waste in all European large cities during the next decade would be a great achievement)

75.18. 🗨️ 94:19 *Precision Chemistry for Precision Medicine*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 3.1 Manufacturing technologies
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Precision Chemistry for Precision Medicine

75.19. 🗨️ 94:20 *Fossil fuel-free petrochemistry: A future after oil, gas and coal*

Coding:

- 3.8 Low carbon and clean industry
- 5.6 Bio-based innovation systems
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

Fossil fuel-free petrochemistry: A future after oil, gas and coal

75.20. 🗨️ 94:21 *Solving the Renewable Energy Storage Problem*

Coding:

- 4.9 Energy storage
- SDG 7_Affordable and clean energy

Content:

Solving the Renewable Energy Storage Problem

75.21. 🗨️ 94:22 *Distributed Solutions for Energy, Computing and Food*

Coding:

- 3.5 Next generation Internet
- 4.3 Energy systems and grids
- 5.5 Food systems
- SDG 7_Affordable and clean energy
- SDG 8_Decent work and economic growth

- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

Distributed Solutions for Energy, Computing and Food


75.22.  94:23 Assistant Robots for Elderly People

Coding:

- 1.1 Health throughout the life course
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Assistant Robots for Elderly People


75.23.  94:24 Automatic Basic Justice: an AI system that scores above usual justice systems for basic questions

Coding:

- 2.3 Social and economic transformations
- 3.4 Artificial intelligence and robotics
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

Automatic Basic Justice: an AI system that scores above usual justice systems for basic questions

75.24.  94:25 Tutor System at the Hospital: an AI system that supports patients and families indicating them the b...

Coding:


- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- 3.4 Artificial intelligence and robotics
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Tutor System at the Hospital: an AI system that supports patients and families indicating them the best options and offering a second opinion using the same info that doctors have

76.  76 RO_13

1 Quotations:

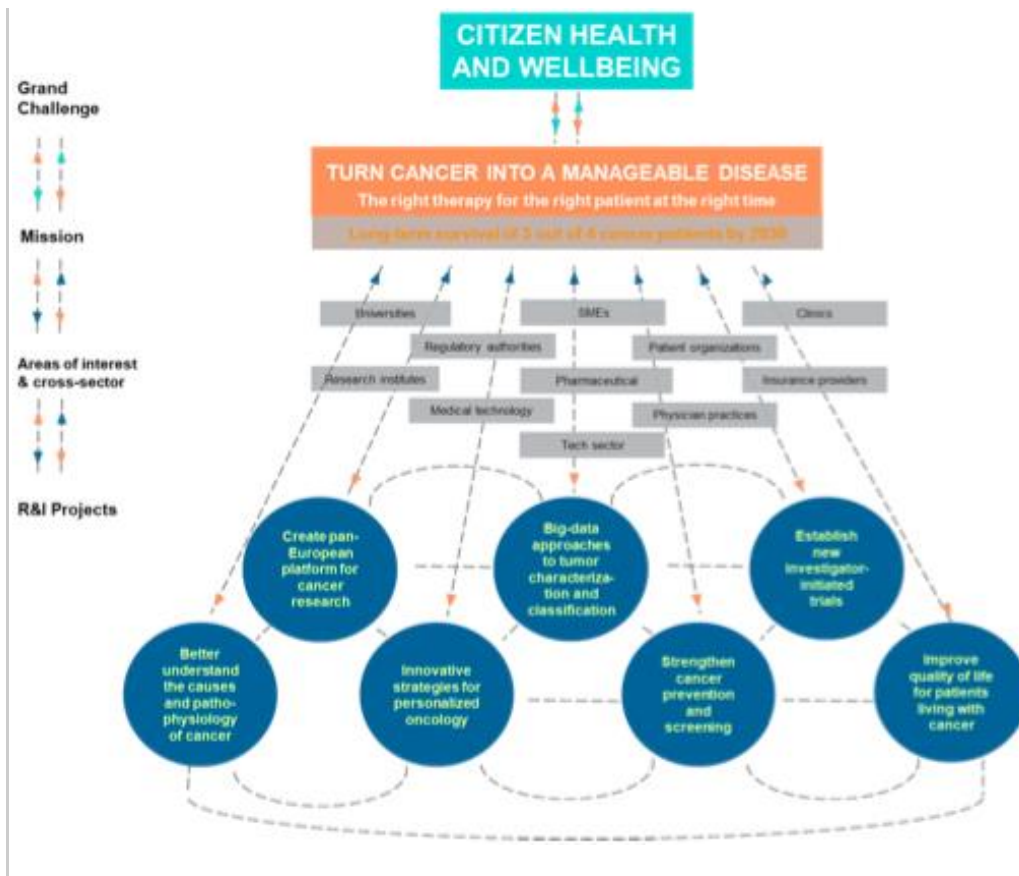
76.1.  95:1 Turn cancer into a manageable disease Long-term survival of 3 out of 4 cancer patients by 2030

Coding:

- 1.2 Environmental and social health determinants
- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Turn cancer into a manageable disease
Long-term survival of 3 out of 4 cancer patients by 2030



77. 77 RO_14

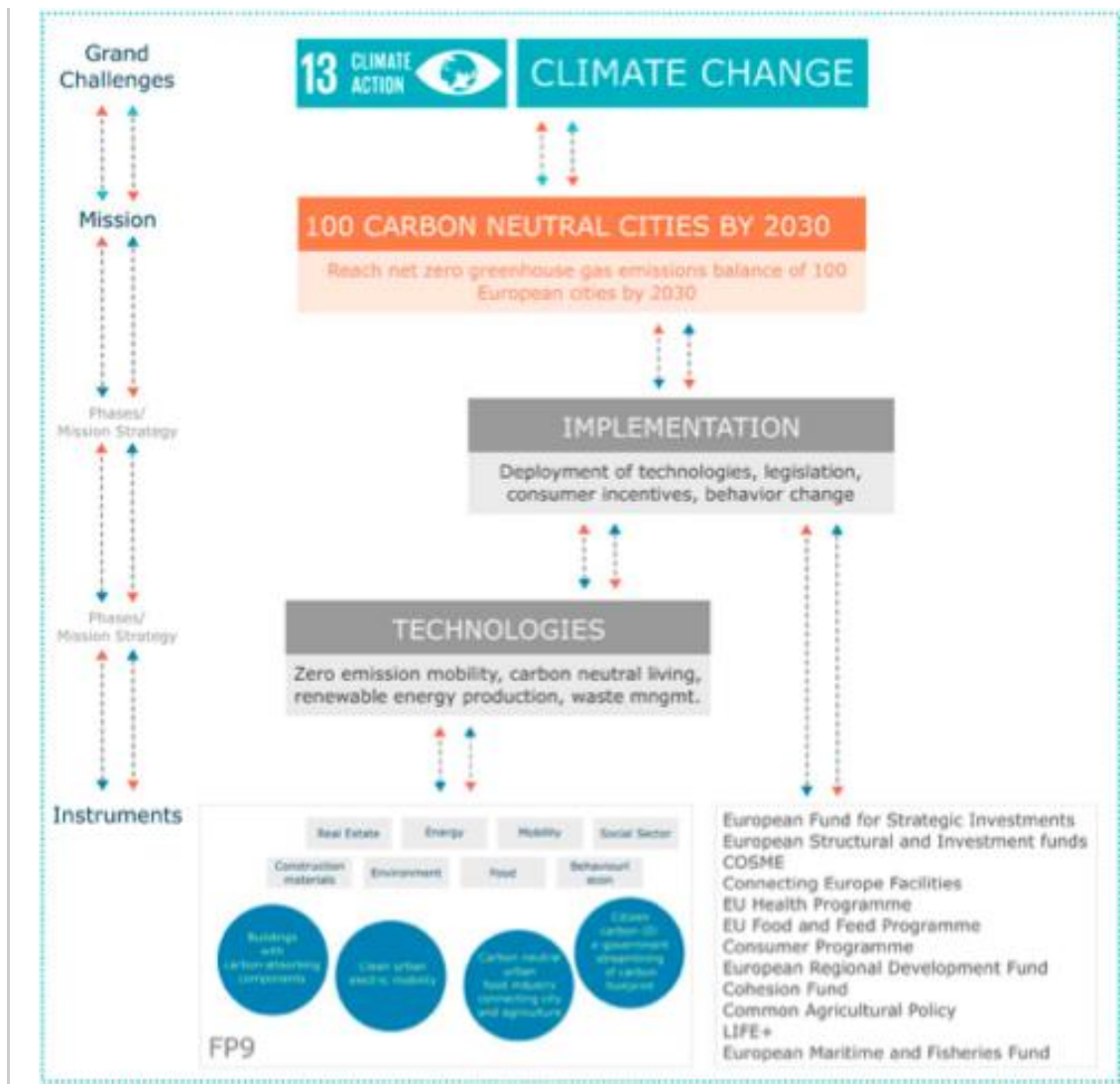
1 Quotations:

77.1. 96:8 Quotation 96:8

Coding:

- 4.1 Climate science and solutions
- 4.5 Communities and cities
- SDG 11_Sustainable cities and communities
- SDG 13_Climate action

Content:



78. 78 O_1

4 Quotations:

78.1. 97:10 *Living Together: Building Sustainable, Open and Democratic Societies for the Future*

Coding:

- 2.1 Democracy
- 2.2 Cultural heritage
- SDG 10_Reducing inequalities
- SDG 16_Peace, justice and strong institutions

Content:

Living Together: Building Sustainable, Open and Democratic Societies for the Future

78.2. 97:11 *Catching up with Innovation: Preparing for Social Consequences and Embracing Opportunities*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 2.2 Cultural heritage
- 2.3 Social and economic transformations
- 3.2 Digital technologies
- 3.4 Artificial intelligence and robotics
- 4.2 Energy supply
- SDG 8_Decent work and economic growth

- SDG 9_Industry, innovation and infrastructure
- SDG 10_Reducing inequalities
- SDG 16_Peace, justice and strong institutions

Content:

Catching up with Innovation: Preparing for Social Consequences and Embracing Opportunities


78.3.  97:12 *Growing up and Ageing in Europe: A Good Life and a Dignified Death*

Coding:

- 1.1 Health throughout the life course
- 2.2 Cultural heritage
- 2.3 Social and economic transformations
- SDG 3_Good health and well-being for people
- SDG 8_Decent work and economic growth
- SDG 10_Reducing inequalities

Content:

Growing up and Ageing in Europe: A Good Life and a Dignified Death

78.4.  97:13 *Truth, Trust and Expertise: Establishing and Securing Trust as a Basis for Sustainable and Legitimat...*

Coding:


- 2.1 Democracy
- 2.5 Protection and security
- 2.6 Cybersecurity
- 3.2 Digital technologies
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

Truth, Trust and Expertise: Establishing and Securing Trust as a Basis for Sustainable and Legitimate Governance

79.  79 RO_15

1 Quotations:

79.1.  98:1 *Mission for an integrated, low carbon and socially inclusive mobility for all*

Coding:


- 4.7 Clean transport and mobility
- 4.8 Smart mobility
- SDG 9_Industry, innovation and infrastructure
- SDG 10_Reducing inequalities

Content:

Mission for an integrated, low carbon and socially inclusive mobility for all

80.  80 RO_16

1 Quotations:

80.1.  99:1 *Achieving zero-carbon emission growth by 2050*


Coding:

- 3.7 Circular industries
- 4.1 Climate science and solutions
- 4.2 Energy supply
- 4.3 Energy systems and grids
- 4.7 Clean transport and mobility
- 4.9 Energy storage


- SDG 8_Decent work and economic growth
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities
- SDG 12_Responsible consumption and production
- SDG 13_Climate action

Content:

Achieving zero-carbon emission growth by 2050

81.  81 RO_17

3 Quotations:


81.1.  *100:1 1001 crops: Nutritional insufficiency and disease are closely linked and one of the greatest world c...*

Coding:

- 1.2 Environmental and social health determinants
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 3_Good health and well-being for people

Content:

1001 crops: Nutritional insufficiency and disease are closely linked and one of the greatest world challenges. We eat only 200 of >10.000 edible plants. Many neglected crops are rich in micronutrients, vitamins and health-promoting plant compounds. The mission will improve the performance and value of underutilized nutritious plants for diverse healthy diets grown sustainably.


81.2.  *100:2 Planty Food - Society is concerned about the impact of the human diet on climate and global warming...*

Coding:

- 4.1 Climate science and solutions
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 13_Climate action

Content:

Planty Food - Society is concerned about the impact of the human diet on climate and global warming. Eating less meat will mitigate climate change and improve animal welfare. The mission is to design innovative food-production strategies based on new / improved plant species that will benefit the environment and food accessibility, helping to alleviate malnutrition.

81.3.  *100:3 Green Bio-Factories: The transition to a bio-based economy is driven by rising prices and sustainabi...*

Coding:

- 5.3 Agriculture, forestry and rural areas
- 5.6 Bio-based innovation systems
- SDG 12_Responsible consumption and production
- SDG 15_Life on land

Content:

Green Bio-Factories: The transition to a bio-based economy is driven by rising prices and sustainability concerns. The challenge is global; the goal to unlock the potential of plant biodiversity for pharmaceuticals, flavours, fragrances, cosmetics, food and fine chemicals.

82.  82 RO_18

8 Quotations:

82.1. 📄 *102:2 Enabling Our Ageing Population – Developing new technologies, services and systems to support an agi...*

Coding:

- 1.1 Health throughout the life course
- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Enabling Our Ageing Population – Developing new technologies, services and systems to support an aging population is a pressing current challenge that will take on further urgency as the proportion of older people increases globally.

82.2. 📄 *102:3 Averting an Antimicrobial Resistance Apocalypse – A mission that addresses the challenge of antimicr...*

Coding:

- 1.4 Infectious diseases
- SDG 3_Good health and well-being for people

Content:

Averting an Antimicrobial Resistance Apocalypse – A mission that addresses the challenge of antimicrobial resistance using a one-health approach.

82.3. 📄 *102:4 Sustainable Low Carbon Energy for All – A mission to deliver advances across energy efficiency, expl...*

Coding:

- 4.2 Energy supply
- 4.3 Energy systems and grids
- 4.9 Energy storage
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure

Content:

Sustainable Low Carbon Energy for All – A mission to deliver advances across energy efficiency, exploitation, storage and distribution to ensure adequate, equitable and sustainable energy for all.

82.4. 📄 *102:5 Forming a fit-for purpose Food Landscape – This mission will deliver safe, sustainable and sufficien...*

Coding:

- 1.2 Environmental and social health determinants
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 3_Good health and well-being for people

Content:

Forming a fit-for purpose Food Landscape – This mission will deliver safe, sustainable and sufficient food supplies across the world.

82.5. 📄 *102:6 Nuclear Energy and Waste – A mission that will address whether to continue or not with nuclear and w...*

Coding:

- 3.7 Circular industries
- 4.2 Energy supply

- SDG 7_Affordable and clean energy
- SDG 12_Responsible consumption and production

Content:

Nuclear Energy and Waste – A mission that will address whether to continue or not with nuclear and which will develop the expertise as many things have to be done to replace nuclear or to retreat waste.

82.6. 🗨️ *102:7 A Clean Sustainable World – This mission strives to engender resource efficiency, the circular econo...*

Coding:

- 3.7 Circular industries
- 3.8 Low carbon and clean industry
- 4.2 Energy supply
- 5.2 Biodiversity and natural capital
- 5.6 Bio-based innovation systems
- SDG 7_Affordable and clean energy
- SDG 12_Responsible consumption and production

Content:

A Clean Sustainable World – This mission strives to engender resource efficiency, the circular economy the protection and replacement if critical elements and the use of sunlight to drive chemical and fuel manufacture.

82.7. 🗨️ *102:8 Eliminating Lifestyle Diseases – led by sociological and psychological efforts to change behaviours...*

Coding:

- 1.1 Health throughout the life course
- 1.2 Environmental and social health determinants
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 3_Good health and well-being for people

Content:

Eliminating Lifestyle Diseases – led by sociological and psychological efforts to change behaviours that lead to such illnesses as obesity, diabetes, addictions and anorexia, this Mission will use all the tools of food chemistry and formulation as well as medical interventions to improve the health, quality of life and life expectancy of a sector of society that is growing at an alarming rate.

82.8. 🗨️ *102:9 Smart non-invasive Medical Diagnostics – This mission will lead to smart fast non-invasive diagnosti...*

Coding:

- 1.3 Non-communicable and rare diseases
- 1.4 Infectious diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Smart non-invasive Medical Diagnostics – This mission will lead to smart fast non-invasive diagnostics for a whole range of diseases, as well as imaging hard and soft tissue allowing the phasing out of X- radiography and other potentially harmful techniques.

83. 📄 83 RO_19

1 Quotations:

83.1. 🗨️ *103:2 The 100% renewable energy city*


Coding:

- 4.2 Energy supply
- 4.3 Energy systems and grids
- 4.4 Buildings and industrial facilities in energy transition
- 4.5 Communities and cities
- 4.9 Energy storage
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

The 100% renewable energy city

84.  84 RO_20**4 Quotations:**


- 84.1.  104:1 *There is a need to understand the role of global cumulative impacts on the functioning of local mari...*

Coding:

- 4.1 Climate science and solutions
- 5.1 Environmental observation
- 5.4 Sea and oceans
- SDG 13_Climate action
- SDG 14_Life below water

Content:

There is a need to understand the role of global cumulative impacts on the functioning of local marine ecosystems to preserve the associated Ocean services in provision of food, energy, raw and genetic materials; climate and natural hazard regulation; and increasing all the cultural and aesthetic services provided to our future societies.


- 84.2.  104:2 *There is a need to create innovative and coordinated solutions for safe, inclusive, green, resilient...*

Coding:

- 4.5 Communities and cities
- 5.4 Sea and oceans
- SDG 11_Sustainable cities and communities
- SDG 14_Life below water

Content:

There is a need to create innovative and coordinated solutions for safe, inclusive, green, resilient and sustainable marine urban spaces. New monitoring, conservation and restoration measures of the marine urban space should expand the “Blue” component of present day “Grey” cities, to benefit local populations and global Ocean health.


- 84.3.  104:3 *Better predictions, observations and theory are needed to manage and share the “Ocean’s commons” in...*

Coding:

- 5.4 Sea and oceans
- SDG 14_Life below water

Content:

Better predictions, observations and theory are needed to manage and share the “Ocean’s commons” in a fair and sustainable way under the present global challenges.

- 84.4.  104:4 *By pursuing the benefits hidden within the ocean, while also safeguarding ocean resources and ecosys...*

Coding:


- 1.2 Environmental and social health determinants
- 5.4 Sea and oceans
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 3_Good health and well-being for people
- SDG 14_Life below water

Content:

By pursuing the benefits hidden within the ocean, while also safeguarding ocean resources and ecosystem productivity, ocean scientists can make a major contribution to improving human health in the 21st century and beyond.

85.  85 RO_21

1 Quotations:

85.1.  105:1 *Quotation 105:1*

Coding:


- 4.1 Climate science and solutions
- 5.1 Environmental observation
- SDG 13_Climate action

Content:

[Enabling Climate Action through Basic Research](#)

86.  86 RO_22

2 Quotations:

86.1.  106:1 *A plastic-free ocean*

Coding:

- 5.4 Sea and oceans
- 5.7 Circular systems
- SDG 12_Responsible consumption and production
- SDG 14_Life below water

Content:

A plastic-free ocean

86.2.  106:2 *Equitable and reliable food from the ocean*

Coding:


- 5.4 Sea and oceans
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 14_Life below water

Content:

Equitable and reliable food from the ocean

87.  87 RO_23

1 Quotations:

87.1.  107:1 *Prevention and reduction of global threat and disease burden from infectious diseases*

Coding:

- 1.4 Infectious diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Prevention and reduction of global threat and disease burden from infectious diseases

88. 88 RO_24

1 Quotations:

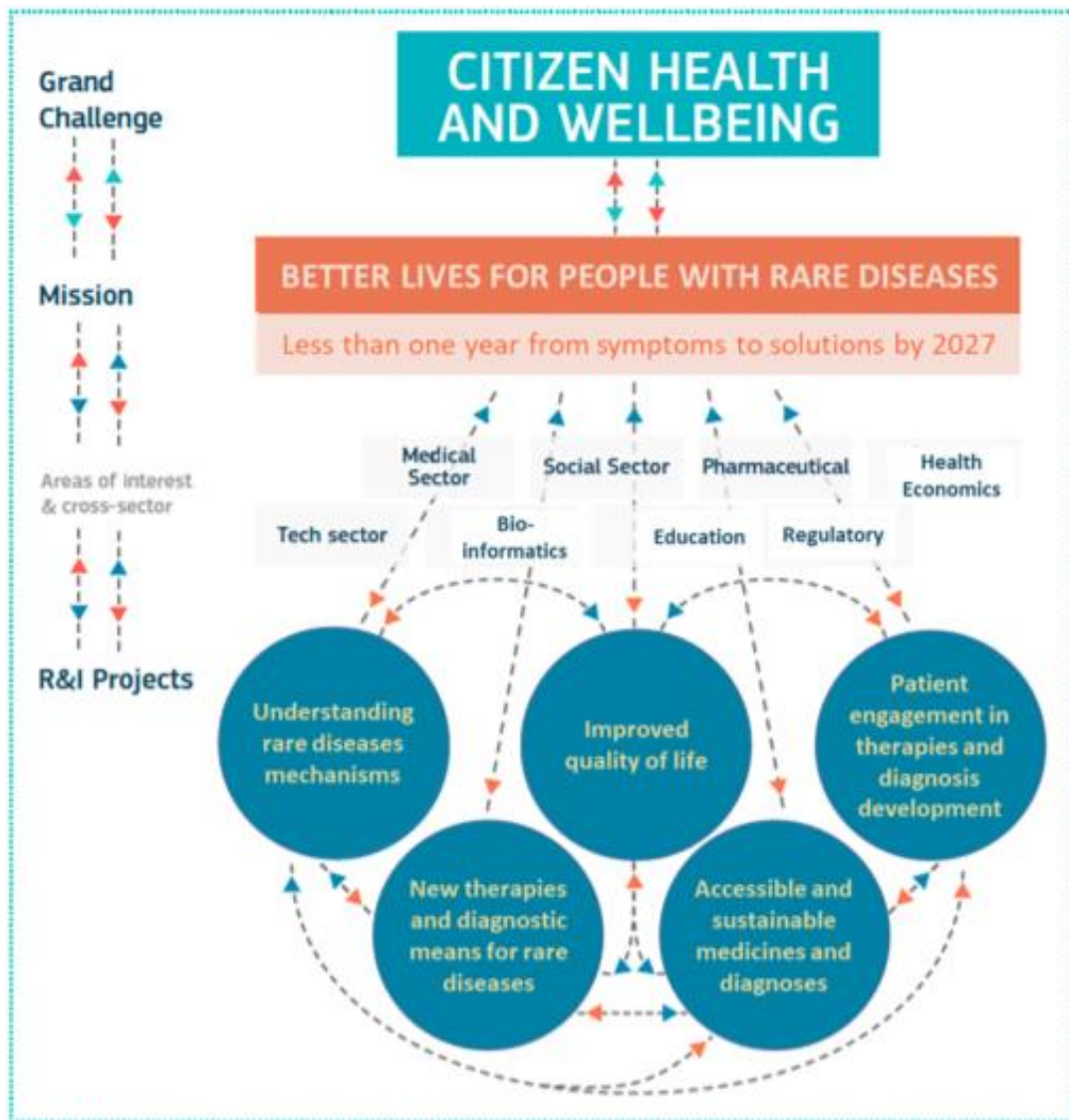
88.1. 108:1 *BETTER LIVES FOR PEOPLE WITH RARE DISEASES* Less than one year from symptoms to solutions by 2027

Coding:

- 1.3 Non-communicable and rare diseases
- SDG 3_Good health and well-being for people

Content:

BETTER LIVES FOR PEOPLE WITH RARE DISEASES Less than one year from symptoms to solutions by 2027



89. 89 RO_25

7 Quotations:

89.1. 109:8 *The data mission that will enable each European citizen to control his/her personal data: DATA SOVER...*

Coding:

- 2.5 Protection and security
- 2.6 Cybersecurity
- 3.2 Digital technologies
- SDG 16_Peace, justice and strong institutions

Content:

The data mission that will enable each European citizen to control his/her personal data: DATA SOVEREIGNTY FOR THE EUROPEAN CITIZEN

89.2. ☰ 109:9 *The personalized medicine mission that will give every European citizen access to the most advanced...*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

The personalized medicine mission that will give every European citizen access to the most advanced cell-based therapies: THE EUROPEAN HAPLOBANK - ENABLING CELL-BASED THERAPY FOR EVERY EUROPEAN CITIZEN

89.3. ☰ 109:10 *The circular economy mission that will create highly competitive products that are in full accordanc...*

Coding:

- 3.7 Circular industries
- SDG 12_Responsible consumption and production

Content:

The circular economy mission that will create highly competitive products that are in full accordance with the principles of the circular economy: CIRCULAR PRODUCTS MADE IN EUROPE: CERTIFIED!

89.4. ☰ 109:11 *The mobility mission that will integrate the different approaches to autonomous driving throughout E...*

Coding:

- 4.5 Communities and cities
- 4.7 Clean transport and mobility
- 4.8 Smart mobility
- SDG 11_Sustainable cities and communities

Content:

The mobility mission that will integrate the different approaches to autonomous driving throughout Europe and lead to a single European transport area: FULLY AUTONOMOUS AND ZERO-EMISSION DRIVING BETWEEN MAIN EUROPEAN CITIES BY 2030


89.5. ☰ 109:12 *The health mission that will save hundreds of thousands of lives: REDUCE THE BURDEN OF ANTI-MICROBIA...*

Coding:

- 1.4 Infectious diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

The health mission that will save hundreds of thousands of lives: REDUCE THE BURDEN OF ANTI-MICROBIAL RESISTANCE


89.6.  109:13 *The food mission that will empower European citizens to re-design the food production chain in a co-...*

Coding:

- 2.3 Social and economic transformations
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 10_Reducing inequalities

Content:

The food mission that will empower European citizens to re-design the food production chain in a co-creation approach: CITIZEN SCIENCE FOR SAFE AND HEALTHY FOOD

89.7.  109:14 *digitization will take over no matter if we provide a general, standardized framework for the storag...*

Coding:

- 3.2 Digital technologies
- 3.6 High performance computing and Big Data

Content:

digitization will take over no matter if we provide a general, standardized framework for the storage and use of data (data mission). But if we did, we would enable a citizen-centered digitization in all sectors. A targeted use of (big) data is essential in all our missions and will be in most innovations that we see coming in future years.

90.  90 RO_26

15 Quotations:

90.1.  110:1 *Affordable, sustainable and clean energy supply*

Coding:

- 4.2 Energy supply
- SDG 7_Affordable and clean energy

Content:

Affordable, sustainable and clean energy supply


90.2.  110:2 *Decode the essence of information processing*

Coding:

- 3.2 Digital technologies
- 3.6 High performance computing and Big Data
- SDG 9_Industry, innovation and infrastructure

Content:

Decode the essence of information processing

90.3.  110:3 *Turn cancer into a manageable disease: long-term survival of 3 out of 4 cancer patients by 2030*

Coding:

- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Turn cancer into a manageable disease: long-term survival of 3 out of 4 cancer patients by 2030

90.4. 📄 110:4 PanEuropeanCarbon-NeutralEnergySystemDesignandOperation

Coding:

- 4.2 Energy supply
- 4.3 Energy systems and grids
- 4.9 Energy storage
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure

Content:

PanEuropeanCarbon-NeutralEnergySystemDesignandOperation

90.5. 📄 110:5 BlueOCEAN: Providing the Healthy Ocean We Need for the Future We Want

Coding:

- 5.1 Environmental observation
- 5.4 Sea and oceans
- SDG 14_Life below water

Content:

BlueOCEAN:
Providing the Healthy Ocean We Need for the Future We Want

90.6. 📄 110:6 FutureEcosystems–SecuringResources,FunctionsandServicesof Future Land and Freshwater Ecosystems

Coding:

- 5.2 Biodiversity and natural capital
- SDG 6_Clean water and sanitation
- SDG 15_Life on land

Content:

FutureEcosystems–SecuringResources,FunctionsandServicesof Future Land and Freshwater Ecosystems

90.7. 📄 110:7 Sustainablelivelihoodinachangingclimate

Coding:

- 2.4 Disaster-resilient societies
- 4.1 Climate science and solutions
- SDG 11_Sustainable cities and communities
- SDG 13_Climate action

Content:

Sustainablelivelihoodinachangingclimate

90.8. 📄 110:8 "EUDiaCure–UnifiedEuropeanActionforaDiabetes-FreeEurope": Reverse the diabetes epidemy within a deca...

Coding:

- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

"EUDiaCure–UnifiedEuropeanActionforaDiabetes-FreeEurope": Reverse the diabetes epidemy within a decade

90.9. 📄 110:9 TacklingAntimicrobialResistance(AMR)by novelantibioticsand pathoblockers"

Coding:

- 1.4 Infectious diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

TacklingAntimicrobialResistance(AMR)by novelantibioticsand pathoblockers”

90.10. 🍷 110:10 Halving the human burden of dementia by 2030

Coding:

- 1.1 Health throughout the life course
- 1.3 Non-communicable and rare diseases
- 1.6 Health care systems
- SDG 3_Good health and well-being for people

Content:

Halving the human burden of dementia by 2030

90.11. 🍷 110:11 EuropeanAviationGoesElectric

Coding:

- 4.7 Clean transport and mobility
- 4.8 Smart mobility
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

EuropeanAviationGoesElectric

90.12. 🍷 110:12 4 hrs door-to-door on intra-European travel within central Europe and 5 hrs including the periphery...

Coding:

- 4.8 Smart mobility
- SDG 9_Industry, innovation and infrastructure

Content:

4 hrs door-to-door on intra-European travel within central Europe and 5 hrs including the periphery of the EU for 90% of travellers by 2040’

90.13. 🍷 110:13 Identify Dark Matter

Coding:

- 3.9 Space
- SDG 9_Industry, innovation and infrastructure

Content:

Identify Dark Matter

90.14. 🍷 110:14 Use our data for our purposes

Coding:

- 2.6 Cybersecurity
- 3.2 Digital technologies
- 3.6 High performance computing and Big Data
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

Use our data for our purposes

90.15. 🗨️ *110:15 Materials for sustainable markets, growth and citizens' wellbeing*

Coding:

- 3.1 Manufacturing technologies
- 3.2 Digital technologies
- 3.3 Advanced materials
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

Materials for sustainable markets, growth and citizens' wellbeing

91. 📄 **91 RO_27**

5 Quotations:

91.1. 🗨️ *113:9 BioFABrication for tailored ADVANCED therapies by 2030 (ADVANCEFAB 2030)*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

BioFABrication for tailored ADVANCED therapies by 2030 (ADVANCEFAB 2030)

91.2. 🗨️ *113:10 AVoid the use Of anY research ANIMAls beyond 2030 (AVOYANIM 2030)*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

AVoid the use Of anY research ANIMAls beyond 2030 (AVOYANIM 2030)

91.3. 🗨️ *113:11 Human-Artificial Intelligence collaboration for Good (SAPIENS 5.0)*

Coding:

- 3.4 Artificial intelligence and robotics
- SDG 9_Industry, innovation and infrastructure

Content:

Human-Artificial Intelligence collaboration for Good (SAPIENS 5.0)

91.4. 🗨️ *113:12 BioEngineered Living Systems (BELS)*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 2.5 Protection and security
- 5.2 Biodiversity and natural capital
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure
- SDG 15_Life on land
- SDG 16_Peace, justice and strong institutions

Content:

BioEngineered Living Systems (BELS)


91.5. 🗨️ *113:13 Converge to a transdisciplinary disruptive transformative patient centred personalised medicine stro...*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Converge to a transdisciplinary disruptive transformative patient centred personalised medicine strongly built on emerging technologies for a new ERA of healing & healthcare 4.0 for a global society (Trans4mMED)

92.  **92 RO_28****1 Quotations:**

92.1.  114:1 *Towards sustainable conversion of feedstock into energy and chemicals*

Coding:

- 3.8 Low carbon and clean industry
- 5.6 Bio-based innovation systems
- SDG 11_Sustainable cities and communities
- SDG 12_Responsible consumption and production

Content:

Towards sustainable conversion of feedstock into energy and chemicals

93.  **93 RO_29****3 Quotations:**

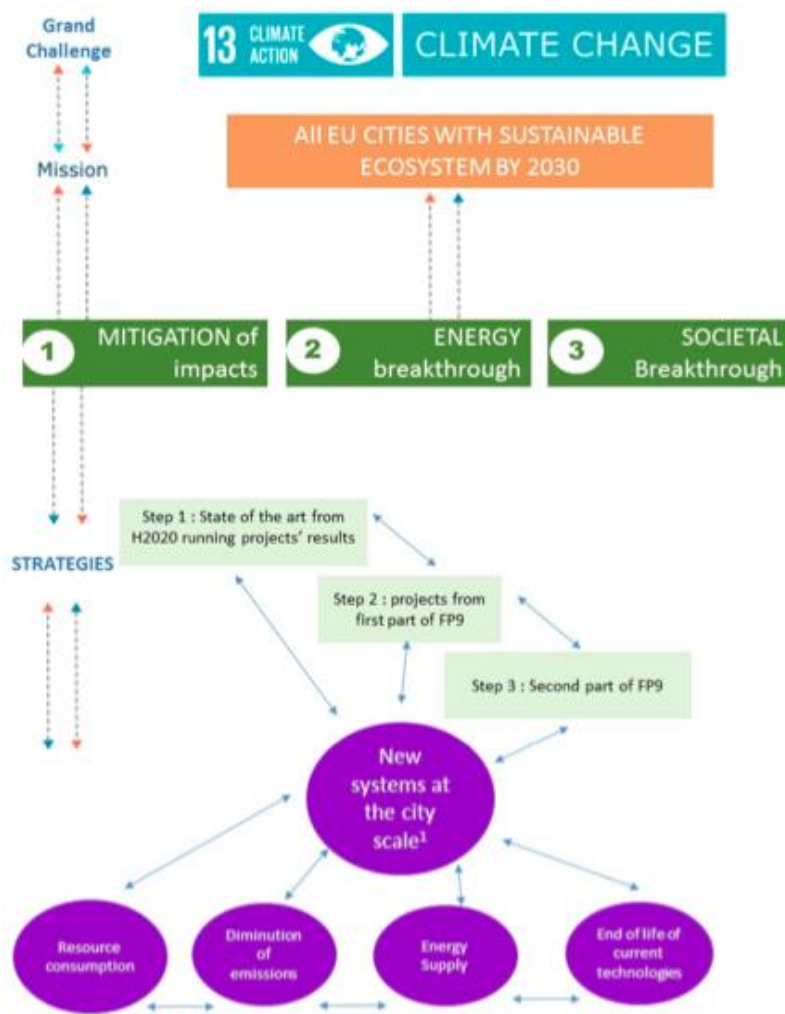
93.1.  115:4 *All EU cities as sustainable ecosystems by 2030*

Coding:

- 4.5 Communities and cities
- 4.7 Clean transport and mobility
- 4.8 Smart mobility
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

All EU cities as sustainable ecosystems by 2030



93.2. 🗨️ 115:5 Zero fatalities due to natural disaster by 2030

Coding:

- 2.4 Disaster-resilient societies
- 4.1 Climate science and solutions
- 5.1 Environmental observation
- SDG 11_Sustainable cities and communities
- SDG 13_Climate action

Content:

Zero fatalities due to natural disaster by 2030

93.3. 🗨️ 115:6 A safe and sustainable mobility for all by 2030

Coding:

- 4.7 Clean transport and mobility
- 4.8 Smart mobility
- SDG 9_Industry, innovation and infrastructure
- SDG 10_Reducing inequalities

Content:

A safe and sustainable mobility for all by 2030

94. 📄 94 RO_30

3 Quotations:


94.1. 🗨️ 116:1 Towards healthier and sustainable diets for all

Coding:

- 1.2 Environmental and social health determinants
- 5.5 Food systems
 - SDG 2_Zero hunger
 - SDG 3_Good health and well-being for people

Content:

Towards healthier and sustainable diets for all


94.2.  116:2 *Carbon neutral resilient food systems*

Coding:

- 2.3 Social and economic transformations
- 4.1 Climate science and solutions
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
 - SDG 2_Zero hunger
 - SDG 8_Decent work and economic growth
 - SDG 13_Climate action

Content:

Carbon neutral resilient food systems

94.3.  116:3 *Quotation 116:3*

Coding:


- 5.2 Biodiversity and natural capital
- 5.3 Agriculture, forestry and rural areas
 - SDG 2_Zero hunger
 - SDG 15_Life on land

Content:

Towards a chemical pesticide-free agriculture

95.  95 RO_31

1 Quotations:

95.1.  117:1 *foundation for a positive and constructive Future of Media, here, in Europe – safeguarding media plu...*

Coding:


- 2.2 Cultural heritage
- 2.3 Social and economic transformations
 - SDG 4_Quality education
 - SDG 16_Peace, justice and strong institutions

Content:

foundation for a positive and constructive Future of Media, here, in Europe – safeguarding media pluralism and preserving cultural diversity in a joint research and innovation effort.

96.  96 RO_32

1 Quotations:

96.1.  118:1 *Society increasing resilience to natural risks through geohazard monitoring*

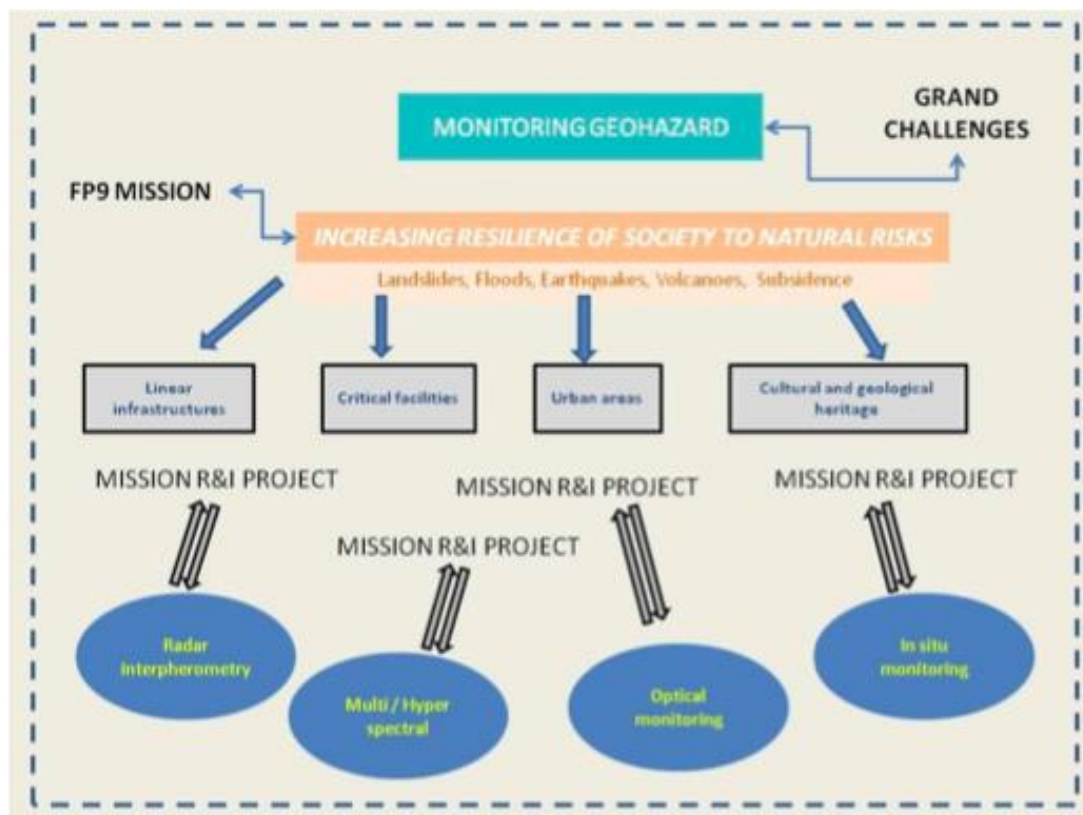
Coding:

- 2.4 Disaster-resilient societies
- 2.5 Protection and security
- 3.2 Digital technologies
- 4.5 Communities and cities
 - SDG 9_Industry, innovation and infrastructure

- SDG 11_Sustainable cities and communities
- SDG 16_Peace, justice and strong institutions

Content:

Society increasing resilience to natural risks through geohazard monitoring



97. 97 RO_33

2 Quotations:

97.1. 119:1 A mission on sustainable water use will positively contribute to a circular economy

Coding:

- 5.2 Biodiversity and natural capital
- 5.7 Circular systems
- SDG 6_Clean water and sanitation
- SDG 12_Responsible consumption and production

Content:

A mission on sustainable water use will positively contribute to a circular economy

97.2. 119:2 Material and energy efficiency is perhaps the most obvious aspect of resource efficiency required by...


Coding:

- 3.7 Circular industries
- 4.3 Energy systems and grids
- 4.4 Buildings and industrial facilities in energy transition
- 4.9 Energy storage
- 5.2 Biodiversity and natural capital
- 5.7 Circular systems
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production
- SDG 15_Life on land

Content:

Material and energy efficiency is perhaps the most obvious aspect of resource efficiency required by the demand from a world population enjoying an improving quality of life, associated with increased use of resources. In such a mission, it is important to have a systemic view on any product, process or service.

98.  98 RO_34**1 Quotations:**

- 98.1.  *120:1 Integrated Crop Production would support an interdisciplinary and multi-sector mission.*

Coding:

- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 2_Zero hunger

Content:

Integrated Crop Production would support an interdisciplinary and multi-sector mission.

99.  99 RO_35**1 Quotations:**


- 99.1.  *121:1 Identifying the potential of Complementary and Alternative Methods (CAM) to support efforts in copin...*


Coding:

- 1.6 Health care systems
- SDG 3_Good health and well-being for people

Content:

Identifying the potential of Complementary and Alternative Methods (CAM) to support efforts in coping with actual threads in European public health systems

100.  100 RO_36**5 Quotations:**


- 100.1.  *122:2 Sustainable food production will secure societies in a changing world in the next decades*

Coding:

- 5.2 Biodiversity and natural capital
- 5.3 Agriculture, forestry and rural areas
- 5.4 Sea and oceans
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 14_Life below water
- SDG 15_Life on land

Content:

Sustainable food production will secure societies in a changing world in the next decades

- 100.2.  *122:3 One Health - integrate human, animal, plant and ecosystems health until 2030*

Coding:

- 1.2 Environmental and social health determinants
- 4.1 Climate science and solutions
- 5.2 Biodiversity and natural capital
- 5.4 Sea and oceans
- SDG 3_Good health and well-being for people
- SDG 13_Climate action

- SDG 14_Life below water
- SDG 15_Life on land

Content:

One Health - integrate human, animal, plant and ecosystems health until 2030

100.3. 🗨️ 122:4 *Engendering a deeper understanding of knowledge cultures for a democratic, knowledge-based, inclusiv...*

Coding:

- 2.1 Democracy
- 2.2 Cultural heritage
- 2.4 Disaster-resilient societies
- 3.2 Digital technologies
- SDG 4_Quality education
- SDG 10_Reducing inequalities
- SDG 16_Peace, justice and strong institutions

Content:

Engendering a deeper understanding of knowledge cultures for a democratic, knowledge-based, inclusive society by 2030

100.4. 🗨️ 122:5 *Seamless High-Speed Access for Every European Citizen – 10+GB/s by 2030*

Coding:

- 3.2 Digital technologies
- 3.5 Next generation Internet
- SDG 8_Decent work and economic growth
- SDG 9_Industry, innovation and infrastructure

Content:

Seamless High-Speed Access for Every European Citizen – 10+GB/s by 2030

100.5. 🗨️ 122:6 *Total Resilient Industrial Processing and Integrated Digital Environments by 2030*

Coding:

- 2.4 Disaster-resilient societies
- 2.5 Protection and security
- 2.6 Cybersecurity
- 3.2 Digital technologies
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

Total Resilient Industrial Processing and Integrated Digital Environments by 2030

101. 📄 101 RO_37

3 Quotations:

101.1. 🗨️ 123:1 *Urban areas transforming into circular biocities: Carbon neutral production and consuming, zero-poll...*

Coding:

- 3.2 Digital technologies
- 3.6 High performance computing and Big Data
- 3.7 Circular industries
- 4.2 Energy supply
- 4.5 Communities and cities
- 5.6 Bio-based innovation systems
- 5.7 Circular systems

- SDG 7_Affordable and clean energy
- SDG 11_Sustainable cities and communities
- SDG 12_Responsible consumption and production

Content:

Urban areas transforming into circular biocities:
Carbon neutral production and consuming, zero-pollution and zero-waste by 2040.

101.2. 🗨️ 123:2 *Carbon neutral, resilient and healthy food system by 2035*

Coding:

- 5.2 Biodiversity and natural capital
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 6_Clean water and sanitation

Content:

Carbon neutral, resilient and healthy food system by 2035

101.3. 🗨️ 123:3 *Economic growth decoupled from resource depletion by 2030*

Coding:

- 3.7 Circular industries
- 5.2 Biodiversity and natural capital
- 5.6 Bio-based innovation systems
- 5.7 Circular systems
- SDG 8_Decent work and economic growth
- SDG 12_Responsible consumption and production
- SDG 15_Life on land

Content:

Economic growth decoupled from resource depletion by 2030

102. 📄 102 RO_38

3 Quotations:

102.1. 🗨️ 124:1 *To increase Europe's resilience to drought and water shortages in Southern and Central Europe and to...*

Coding:

- 2.4 Disaster-resilient societies
- 4.1 Climate science and solutions
- 5.1 Environmental observation
- 5.2 Biodiversity and natural capital
- SDG 6_Clean water and sanitation
- SDG 13_Climate action

Content:

To increase Europe's resilience to drought and water shortages in Southern and Central Europe and to increased precipitation and flooding in Northern Europe by 2030


102.2. 🗨️ 124:2 *To ensure a healthy environment for Europe through monitoring, new technologies and education*

Coding:

- 1.2 Environmental and social health determinants
- 5.1 Environmental observation
- 5.2 Biodiversity and natural capital
- SDG 3_Good health and well-being for people
- SDG 6_Clean water and sanitation
- SDG 15_Life on land

Content:

To ensure a healthy environment for Europe through monitoring, new technologies and education

102.3.  124:3 *To create new sustainable circular economy business and operating models and cut raw material consum...*

Coding:

- 3.7 Circular industries
- 5.2 Biodiversity and natural capital
- SDG 8_Decent work and economic growth
- SDG 12_Responsible consumption and production

Content:

To create new sustainable circular economy business and operating models and cut raw material consumption by 30% by 2030.

103. 103 RO_39

5 Quotations:

103.1.  125:1 *Healthy Ageing - towards more healthy years during ageing*

Coding:

- 1.1 Health throughout the life course
- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Healthy Ageing - towards more healthy years during ageing


103.2.  125:2 *Oceans for Sustainability*

Coding:

- 5.4 Sea and oceans
- SDG 14_Life below water

Content:

Oceans for Sustainability


103.3.  125:3 *Fighting cancer with Particle Therapy*

Coding:

- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Fighting cancer with Particle Therapy

103.4.  125:4 *Meeting Energy Needs of Future Generations with Nuclear Fusion*

Coding:

- 4.2 Energy supply
- SDG 7_Affordable and clean energy

Content:

Meeting Energy Needs of Future Generations with Nuclear Fusion


103.5.  125:5 *Circular Carbon Technologies*


Coding:

- 3.7 Circular industries
- 5.2 Biodiversity and natural capital
- SDG 12_Responsible consumption and production

Content:

Circular Carbon Technologies

104.  104 RO_40**12 Quotations:**


104.1.  126:1 *Significant increase in the volume of trade of regional food products while using digital platforms...*

Coding:

- 3.2 Digital technologies
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 2_Zero hunger

Content:

Significant increase in the volume of trade of regional food products while using digital platforms for production management and distribution – we propose that at least for 100 European regions, regional food products will be offered within shortened food supply chain before 2025;


104.2.  126:2 *Providing all food products with digital labels in such a way that data on quality, environmental pe...*

Coding:

- 3.2 Digital technologies
- 5.5 Food systems
- SDG 12_Responsible consumption and production

Content:

Providing all food products with digital labels in such a way that data on quality, environmental performance, product authenticity and conditions of production can be accessed by individual customers, not only at the time of purchase, but also at all times;

104.3.  126:3 *Personalized early diagnosis of chronic diseases (e.g. heart disease, diabetes, glaucoma), using dig...*


Coding:

- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
- 3.4 Artificial intelligence and robotics
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Personalized early diagnosis of chronic diseases (e.g. heart disease, diabetes, glaucoma), using digital platforms for automatic data analysis and offering personalized prevention plan for individuals,

with the usage of AI technologies and Bigdata analytics – we propose that before 2030 digital platforms for prevention, treatment and care will be available for chronic diseases causing 50% of disability or death

104.4.  126:4 *Shortening of the time necessary for home rehabilitation and improvement of the quality of life afte...*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Shortening of the time necessary for home rehabilitation and improvement of the quality of life after surgical procedures (using tele-rehabilitation) – using VR/AR technologies as well as gamification approach – we propose that before 2030 all surgical procedures will be followed up by telerehabilitation option from home;

104.5. 🗨️ 126:5 *eCompetences as a fundamental category of lifelong skills held by all young people and most adults b...*

Coding:

- 2.3 Social and economic transformations
- 3.2 Digital technologies
- SDG 4_Quality education

Content:

eCompetences as a fundamental category of lifelong skills held by all young people and most adults before 2025

104.6. 🗨️ 126:6 *Social education with the use of new technologies on: recreational, historical and cultural values,...*

Coding:

- 1.2 Environmental and social health determinants
- 2.2 Cultural heritage
- 2.3 Social and economic transformations
- 4.1 Climate science and solutions
- 5.2 Biodiversity and natural capital
- 5.5 Food systems
- SDG 4_Quality education
- SDG 13_Climate action
- SDG 15_Life on land

Content:

Social education with the use of new technologies on: recreational, historical and cultural values, local food products, traditional food and healthy nutrition, environmental protection and climate change – we propose that before 2035, such platforms will be operational, known and accessed by 50% of EU citizens

104.7. 🗨️ 126:7 *Integrated management of energy produced from alternative sources, taking into account the impact of...*

Coding:

- 4.2 Energy supply
- SDG 7_Affordable and clean energy

Content:

Integrated management of energy produced from alternative sources, taking into account the impact of extreme weather events – we propose that overall losses caused by weather events will decrease before 2025 by 50%


104.8. 🗨️ 126:8 *The development of a creative industry (Start-ups and SMEs) based on the digitally accessible Europe...*

Coding:

- 2.2 Cultural heritage
- 3.2 Digital technologies
- SDG 8_Decent work and economic growth

Content:

The development of a creative industry (Start-ups and SMEs) based on the digitally accessible European cultural heritage – we propose that at least 20.000 startups and SMEs will build their business models sourced on digitized cultural heritage (e.g. Europeana) before 2030


104.9.  126:9 *The development of 10 smart ecosystems before 2035, through improving the innovativeness of geograph...*

Coding:

- 3.2 Digital technologies
- 5.2 Biodiversity and natural capital
- SDG 9_Industry, innovation and infrastructure
- SDG 15_Life on land

Content:

The development of 10 smart ecosystems before 2035, through improving the innovativeness of geographical areas with the highest ecological degradation, in terms of comprehensive digitization of their infrastructure as well as environment and resource management (e.g. around the Baltic Sea)


104.10.  126:10 *Before 2030, 1.000 cities in Europe will offer life contexts in a virtual city, including participat...*

Coding:

- 2.2 Cultural heritage
- 3.2 Digital technologies
- 4.5 Communities and cities
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

Before 2030, 1.000 cities in Europe will offer life contexts in a virtual city, including participation in science, culture and the arts and using interactive and mobile technologies


104.11.  126:11 *Before 2030, introduction of information systems on air quality (including crowdsourcing involvement...*

Coding:

- 1.2 Environmental and social health determinants
- 3.2 Digital technologies
- 4.5 Communities and cities
- 4.7 Clean transport and mobility
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

Before 2030, introduction of information systems on air quality (including crowdsourcing involvement) and the impact on the health of the residents in every municipality with a population of over 100,000, together with the implementation of countermeasures (e.g. urban planning, transport management, decisions on free public transport)


104.12.  126:12 *Developing digital technologies, including AI and cyber-security for better public services.*


Coding:

- 2.3 Social and economic transformations
- 2.6 Cybersecurity
- 3.2 Digital technologies
- 3.4 Artificial intelligence and robotics
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

Developing digital technologies, including AI and cyber-security for better public services.

105.  105 RO_41**1 Quotations:**


105.1.  128:1 *The challenge of new multi-platform & integrated ocean observing systems to understand ocean state a...*

Coding:

- 4.1 Climate science and solutions
- 5.1 Environmental observation
- 5.4 Sea and oceans
- SDG 13_Climate action
- SDG 14_Life below water

Content:

The challenge of new multi-platform & integrated ocean observing systems to understand ocean state and variability from events to climate

106.  106 RO_42**5 Quotations:**


106.1.  129:1 *50 climate resilient major cities in Europe in 2040*

Coding:

- 2.4 Disaster-resilient societies
- 4.1 Climate science and solutions
- 4.5 Communities and cities
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities
- SDG 13_Climate action

Content:

50 climate resilient major cities in Europe in 2040


106.2.  129:2 *Zero water stress in all rivers basins in Europe in 2040*

Coding:

- 4.1 Climate science and solutions
- 5.1 Environmental observation
- 5.2 Biodiversity and natural capital
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 6_Clean water and sanitation
- SDG 13_Climate action

Content:

Zero water stress in all rivers basins in Europe in 2040

106.3.  129:3 *50% less casualties, damage and global disruption from extreme weather events in 2040*

Coding:

- 2.4 Disaster-resilient societies
- 4.1 Climate science and solutions
- 5.1 Environmental observation
- SDG 9_Industry, innovation and infrastructure
- SDG 13_Climate action

Content:

50% less casualties, damage and global disruption from extreme

weather events in 2040

106.4. 🗨️ 129:4 *By 2030, infrastructure is build or refurbished in half of the time, using in comparison half of tod...*

Coding:

- 3.7 Circular industries
- 3.8 Low carbon and clean industry
- 4.5 Communities and cities
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities
- SDG 12_Responsible consumption and production

Content:

By 2030, infrastructure is build or refurbished in half of the time, using in comparison half of today's resources and energy, is twice as good and is obtained for half the cost. By 2040 the development is 90% circular and 100% carbon neutral.

106.5. 🗨️ 129:5 *Water for life and piece: 25% more water and 75% more efficient water use in developing countries by...*

Coding:

- 2.3 Social and economic transformations
- 5.2 Biodiversity and natural capital
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 1_No poverty
- SDG 2_Zero hunger
- SDG 6_Clean water and sanitation

Content:

Water for life and piece: 25% more water and 75% more efficient water use in developing countries by 2040

107. 📄 107 RO_43

9 Quotations:

107.1. 🗨️ 130:1 *The 2 by 20 Mission With a shrinking workforce and a growing elderly population, European industry n...*

Coding:

- 3.1 Manufacturing technologies
- 3.2 Digital technologies
- 3.4 Artificial intelligence and robotics
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 4_Quality education
- SDG 8_Decent work and economic growth
- SDG 9_Industry, innovation and infrastructure

Content:

The 2 by 20 Mission

With a shrinking workforce and a growing elderly population, European industry needs to double the average productivity in the first three labor sectors (Agro/food; manufacturing; services) in 20 years. Accelerating of digitization with robotics, autonomous systems (transport), AR/VR, intelligence, blockchain, IoT/5G will have the largest leverage. But simultaneously, it will be crucial that the people remain relevant in this new paradigm, thanks to life- long learning.

107.2. 🗨️ 130:2 *DeepTech for society: innovation through KET's convergence*

Coding:

- 3.1 Manufacturing technologies
- 3.2 Digital technologies
- 3.3 Advanced materials
- SDG 9_Industry, innovation and infrastructure

Content:

DeepTech for society: innovation through KET's convergence

107.3. ☹️ *130:3 The Data empower European people Mission Data driven decision support is not sufficient anymore. Eur...*

Coding:

- 2.6 Cybersecurity
- 3.2 Digital technologies
- 3.4 Artificial intelligence and robotics
- SDG 8_Decent work and economic growth
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

The Data empower European people Mission
Data driven decision support is not sufficient anymore. Europe needs to create its very own trusted digital market places and ecosystems, where explain ability, interoperability and a normative framework will fully boost the potential of Artificial Intelligence. The ultimate goal is to empower Europeans, in their work, as students, as citizens. But adoption can only be achieved through trust, transparency and ethics.

107.4. ☹️ *130:4 Normative system infrastructures for digital societies Normative systems digitally check, in real ti...*

Coding:

- 2.3 Social and economic transformations
- 2.6 Cybersecurity
- 3.2 Digital technologies
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

Normative system infrastructures for digital societies
Normative systems digitally check, in real time, a priori or posteriori if ICT follows the applicable laws, ethics and other norms and react. Normative systems can change the order of developments in the physical world, e.g. by instructing otherwise autonomous cars. Normative systems are an enabler of the digital transformation of societies. For the interoperability of nations, the basic normative system technologies are an EU issue.

107.5. ☹️ *130:5 Bio for Europe Mission Replacement of fossil feedstocks in biobased feedstock is a major challenge....*

Coding:

- 3.1 Manufacturing technologies
- 5.6 Bio-based innovation systems
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

Bio for Europe Mission
Replacement of fossil feedstocks in biobased feedstock is a major challenge. Trends show Europe is best equipped to make this transition happen and contribute significantly to energy and CO₂-reduction. 40% of all chemicals used worldwide are aromatics and cannot be made from scale gas. It is major challenge to develop effective cost-competitive technologies for bio-aromatics, however it also represent a huge business potential for EU agro and chemical industry.

107.6. 🗨️ 130:6 *Clean air for a better life* Decreasing air quality is a global problem affecting lives. Breakthrough...

Coding:

- 3.2 Digital technologies
- 5.2 Biodiversity and natural capital
- SDG 9_Industry, innovation and infrastructure
- SDG 15_Life on land

Content:

Clean air for a better life
Decreasing air quality is a global problem affecting lives. Breakthroughs in science allow us to objectively measure air quality using satellites. Innovation targets are needed to bring this to wider use in government and industry: 1) constellations of affordable “micro” satellites providing continuous and detailed pollution information, even of densely populated areas. 2) New sensors for new pollution gases. 3) Global information services who identify polluters and cross-border emissions.

107.7. 🗨️ 130:7 *Secure High Speed Comms 4 EU All EU Citizens, Companies, Governments need absolute Secure & High Spe...*

Coding:

- 2.6 Cybersecurity
- 3.5 Next generation Internet
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

Secure High Speed Comms 4 EU
All EU Citizens, Companies, Governments need absolute Secure & High Speed Connectivity everywhere always accessible. Ubiquitous High Speed Connectivity/5G is vital for competitiveness of EU. EU critical infrastructure - Energy Health Transport Telecom Finance Security & Space assets – is too vulnerable for cyber security threats. With an End-to-End Laser Comms and Quantum Key Distribution Network (linking Space, Air, Cities, Rural Nodes) this EU Challenge will be mitigated.

107.8. 🗨️ 130:8 *Disruptive Energy Storage Solutions Sustainable energy generation by PV and wind makes synchronisati...*

Coding:

- 4.9 Energy storage
- SDG 7_Affordable and clean energy

Content:

Disruptive Energy Storage Solutions
Sustainable energy generation by PV and wind makes synchronisation of energy production and consumption (hours/days/seasons) increasingly difficult. The ‘energy challenge’ is becoming a ‘storage challenge’. Disruptive solutions include next generation battery concepts, electricity conversion to synthetic fuels (e.g. Formic Acid and Metal fuels) and direct conversion of photons to fuels. Besides addressing a major societal challenge these also represent a huge business potential for EU industry.

107.9. 🗨️ 130:9 *Industrial electrification The availability of renewable energy is constantly increasing, while indu...*


Coding:


- 3.1 Manufacturing technologies
- 4.2 Energy supply
- 4.9 Energy storage
- 5.6 Bio-based innovation systems
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure

Content:

Industrial electrification

The availability of renewable energy is constantly increasing, while industry needs to drastically decrease its carbon footprint towards 2050. This leads to the common challenge of handling renewable energy surpluses, diversifying feedstocks in the chemical industry, reducing greenhouse gas emissions in energy intensive industry, and meeting societal and regulatory demands on advanced fuels and sustainable chemicals. "Power-to-X" concepts, using (renewable) electricity as a replacement for oil and gas energy sources in the production of chemical products, allow for the combination of a solution to these challenges with the creation of valuable products. This generates opportunities for the energy, chemical and high-tech equipment sectors, whilst addressing the large societal energy and climate challenge.

108.  108 RO_44**1 Quotations:**


108.1.  131:1 *Boosting impact of mental health policies and services for European people, communities and economies...*


Coding:

- 1.1 Health throughout the life course
- 1.3 Non-communicable and rare diseases
- SDG 3_Good health and well-being for people

Content:

Boosting impact of mental health policies and services for European people, communities and economies

109.  109 RO_45**3 Quotations:**

109.1.  132:1 *Integrated sustainable living services for 1000 local communities by 2030*

Coding:

- 3.8 Low carbon and clean industry
- 4.2 Energy supply
- 4.3 Energy systems and grids
- 4.4 Buildings and industrial facilities in energy transition
- 4.5 Communities and cities
- 4.7 Clean transport and mobility
- 4.8 Smart mobility
- 4.9 Energy storage
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities
- SDG 12_Responsible consumption and production

Content:

Integrated sustainable living services for 1000 local communities by 2030


109.2.  132:2 *A sustainable positive spiral in healthcare by 2030*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- 2.6 Cybersecurity
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

A sustainable positive spiral in healthcare by 2030


109.3.  132:3 We believe that chemistry significantly contributes to a sustainable world (developing and deliverin...

Coding:

- 3.1 Manufacturing technologies
- 3.7 Circular industries
- 3.8 Low carbon and clean industry
- 5.6 Bio-based innovation systems
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

We believe that chemistry significantly contributes to a sustainable world (developing and delivering more performant, safe chemicals, produced using less resources (water, solvents, energy, feedstock) and focus on recyclable/reusable products/materials, that it keeps progressing to become fully sustainable, and that it remains important for Flanders/Europe with an ever increasing focus on high value products.

110.  110 RO_46

3 Quotations:


110.1.  133:1 Novel catalytic Solutions for 21st Century Technologies

Coding:

- 3.1 Manufacturing technologies
- 5.6 Bio-based innovation systems
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

Novel catalytic Solutions for 21st Century Technologies

110.2.  133:2 Meeting the demand for new membranes and membrane production processe

Coding:

- 3.1 Manufacturing technologies
- SDG 9_Industry, innovation and infrastructure

Content:

Meeting the demand for new membranes and membrane production processe

110.3.  133:3 Clean Oceans by 2030

Coding:


- 3.7 Circular industries
- 5.4 Sea and oceans
- 5.6 Bio-based innovation systems
- SDG 12_Responsible consumption and production
- SDG 14_Life below water

Content:

Clean Oceans by 2030

111.  111 NGO_Alliance for Biomedical research in Europe

2 Quotations:

111.1.  135:1 Bring together all EU patient data in a single repository governed by a European Council for Health...

Coding:

- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Bring together all EU patient data in a single repository governed by a European Council for Health Research¹ by 2030

111.2. 🗨️ 135:2 *Reduce by at least 50% the mortality and disability of the 5 - 8 000 rare diseases by 2030*

Coding:

- 1.3 Non-communicable and rare diseases
- SDG 3_Good health and well-being for people

Content:

Reduce by at least 50% the mortality and disability of the 5 - 8 000 rare diseases by 2030

112. 📄 **112 NGO_1**

2 Quotations:

112.1. 🗨️ 136:1 *Researchers' training in scientific outreach —> 50 000 researchers*

Coding:

- 2.3 Social and economic transformations
- SDG 4_Quality education

Content:

Researchers' training in scientific outreach —> 50 000 researchers

112.2. 🗨️ 136:2 *Development of Science Outreach Protocols —> create a vademecum to design meeting*

Coding:

- 2.3 Social and economic transformations
- SDG 4_Quality education

Content:

Development of Science Outreach Protocols —> create a vademecum to design meeting

113. 📄 **113 NGO_2**

1 Quotations:

113.1. 🗨️ 137:1 *END POVERTY-RELATED AND NEGLECTED DISEASES*

Coding:

- 1.3 Non-communicable and rare diseases
- 1.4 Infectious diseases
- 2.3 Social and economic transformations
- SDG 1_No poverty
- SDG 3_Good health and well-being for people
- SDG 8_Decent work and economic growth

Content:

END POVERTY-RELATED AND NEGLECTED DISEASES

114. 📄 **114 NGO_3**

1 Quotations:


114.1. 🗨️ 138:1 *Towards a gender-sensitive scientific culture*

Coding:


- 2.2 Cultural heritage
- 2.3 Social and economic transformations
- SDG 5_Gender equality
- SDG 10_Reducing inequalities

Content:

Towards a gender-sensitive scientific culture

115.  115 NGO_4

4 Quotations:


115.1.  140:1 *Increasing economic and social participation of people with chronic diseases — reducing disability b...*

Coding:

- 1.1 Health throughout the life course
- 1.3 Non-communicable and rare diseases
- 2.3 Social and economic transformations
- SDG 3_Good health and well-being for people
- SDG 8_Decent work and economic growth
- SDG 10_Reducing inequalities

Content:

Increasing economic and social participation of people with chronic diseases — reducing disability by 20% and extending average healthy life by 2 years in the next decade


115.2.  140:2 *Reducing the burden of Rheumatic and Musculoskeletal Diseases by 1/4 by 2030*

Coding:

- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- 2.3 Social and economic transformations
- SDG 3_Good health and well-being for people
- SDG 8_Decent work and economic growth
- SDG 9_Industry, innovation and infrastructure

Content:

Reducing the burden of Rheumatic and Musculoskeletal Diseases by 1/4 by 2030


115.3.  140:3 *Reduce by at least 50% the delay in diagnosis and treatment of chronic diseases by 2030*

Coding:

- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Reduce by at least 50% the delay in diagnosis and treatment of chronic diseases by 2030


115.4.  140:4 *Reduce by at least 50% the disabling conditions of the 5 - 8 000 rare diseases through a centralised...*

Coding:


- 1.3 Non-communicable and rare diseases
- SDG 3_Good health and well-being for people

Content:

Reduce by at least 50% the disabling conditions of the 5 - 8 000 rare diseases through a centralised network of centres of excellence in Europe

116.  **116 NGO_5**

1 Quotations:

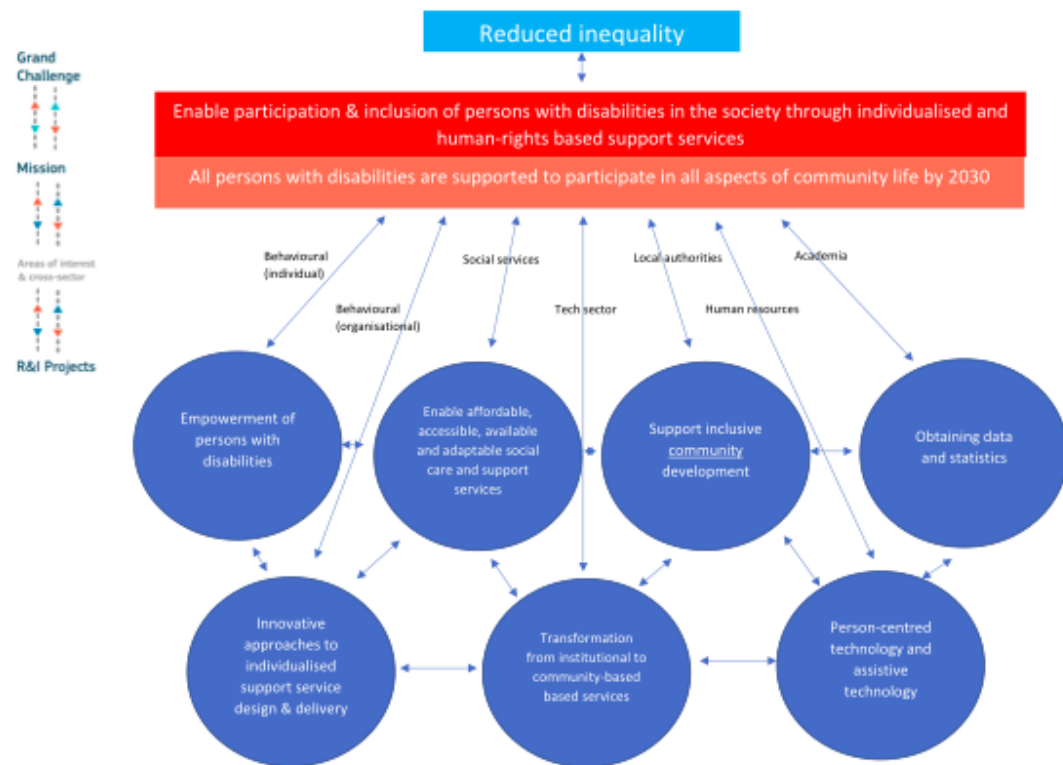
116.1.  141:1 *Enable participation & inclusion of persons with disabilities in the society through individualised...*


Coding:

- 1.3 Non-communicable and rare diseases
- 2.3 Social and economic transformations
- SDG 3_Good health and well-being for people
- SDG 8_Decent work and economic growth
- SDG 10_Reducing inequalities

Content:

Enable participation & inclusion of persons with disabilities in the society through individualised and human-rights based support services



117.  **117 NGO_6**

1 Quotations:

117.1.  144:1 *research and innovation mission with funding of at least €1 billion which aims to develop new vaccin...*

Coding:


- 1.3 Non-communicable and rare diseases
- 1.4 Infectious diseases
- SDG 1_No poverty
- SDG 3_Good health and well-being for people

Content:

research and innovation mission with funding of at least €1 billion which aims to develop new vaccines to end or control epidemic and poverty-related diseases, including HIV/AIDS, TB, malaria and other diseases with epidemic potential, by 2030

118. 118 NGO_7

9 Quotations:

118.1.  145:1 *Smartdistributionandstoragegridsforelectricenergy*

Coding:

- 4.3 Energy systems and grids
- 4.9 Energy storage
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure

Content:

Smartdistributionandstoragegridsforelectricenergy

118.2.  145:2 *Secure,safe,fairandprivacy-awaredigitalsystems*

Coding:

- 2.5 Protection and security
- 2.6 Cybersecurity
- 3.2 Digital technologies
- 3.5 Next generation Internet
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

Secure,safe,fairandprivacy-awaredigitalsystems

118.3.  145:3 *Low-carbon supply of basic metals and materials*

Coding:

- 3.7 Circular industries
- 3.8 Low carbon and clean industry
- 5.2 Biodiversity and natural capital
- SDG 12_Responsible consumption and production

Content:

Low-carbon supply of basic metals and materials

118.4.  145:4 *NanotechnologiesassubstitutesforCriticalRawMaterials*

Coding:

- 3.1 Manufacturing technologies
- 3.3 Advanced materials
- 5.2 Biodiversity and natural capital
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

NanotechnologiesassubstitutesforCriticalRawMaterials

118.5.  145:5 *Multi-modal,hybridandconnectedtransportsystems*

Coding:

- 4.8 Smart mobility
- SDG 9_Industry, innovation and infrastructure

Content:

Multi-modal,hybridandconnectedtransportsystems


118.6.  145:6 *Mass customisation of garments*

Coding:

- 3.1 Manufacturing technologies
- 3.2 Digital technologies
- SDG 9_Industry, innovation and infrastructure

Content:

Mass customisation of garments

118.7.  145:7 *Thermal renovation of buildings*

Coding:

- 4.4 Buildings and industrial facilities in energy transition
- SDG 11_Sustainable cities and communities

Content:

Thermal renovation of buildings

118.8.  145:8 *Bio-basedchemistry*

Coding:

- 5.6 Bio-based innovation systems
- SDG 12_Responsible consumption and production

Content:

Bio-basedchemistry


118.9.  145:9 *Industrialised Circular Economy*

Coding:


- 3.7 Circular industries
- SDG 12_Responsible consumption and production

Content:

Industrialised Circular Economy

119.  **119 NGO_8**

1 Quotations:


119.1.  146:2 *Until 2030 – Empowerment of 100 state-independent Roma communities, support of 100 socially innovati...*

Coding:

- 2.3 Social and economic transformations
- SDG 10_Reducing inequalities

Content:

Until 2030 – Empowerment of 100 state-independent Roma communities, support of 100 socially innovative NGOs that help Roma communities, accompanied by levels of civil legal protection, anti-discrimination and anti-segregation activities.

120.  **120 NGO_9**

1 Quotations:

120.1.  150:1 *new Vaccines for the AMR-linked Poverty Related and Neglected Diseases of Tuberculosis, HIV/Aids and...*

Coding:

- 1.3 Non-communicable and rare diseases
- 1.4 Infectious diseases
- 2.3 Social and economic transformations

- SDG 1_No poverty
- SDG 3_Good health and well-being for people

Content:

new Vaccines for the AMR-linked Poverty Related and Neglected Diseases of Tuberculosis, HIV/Aids and Malaria by 2025-2030



121. 121 O_2

1 Quotations:

121.1. 151:1 The mission for FP9 should be to imperatively consider society-relevant new developments focusing on...

Coding:

- 2.5 Protection and security
- 3.3 Advanced materials
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

The mission for FP9 should be to imperatively consider society-relevant new developments focusing on fire safety. These developments are essential for the building & construction sector requiring sustainable construction products (insulation systems, linings, electrical distribution) and building contents (furniture, textiles, domestic consumer goods) with higher fire safety levels to prevent fire catastrophes such as the Grenfell Tower blaze.

122. 122 O_3

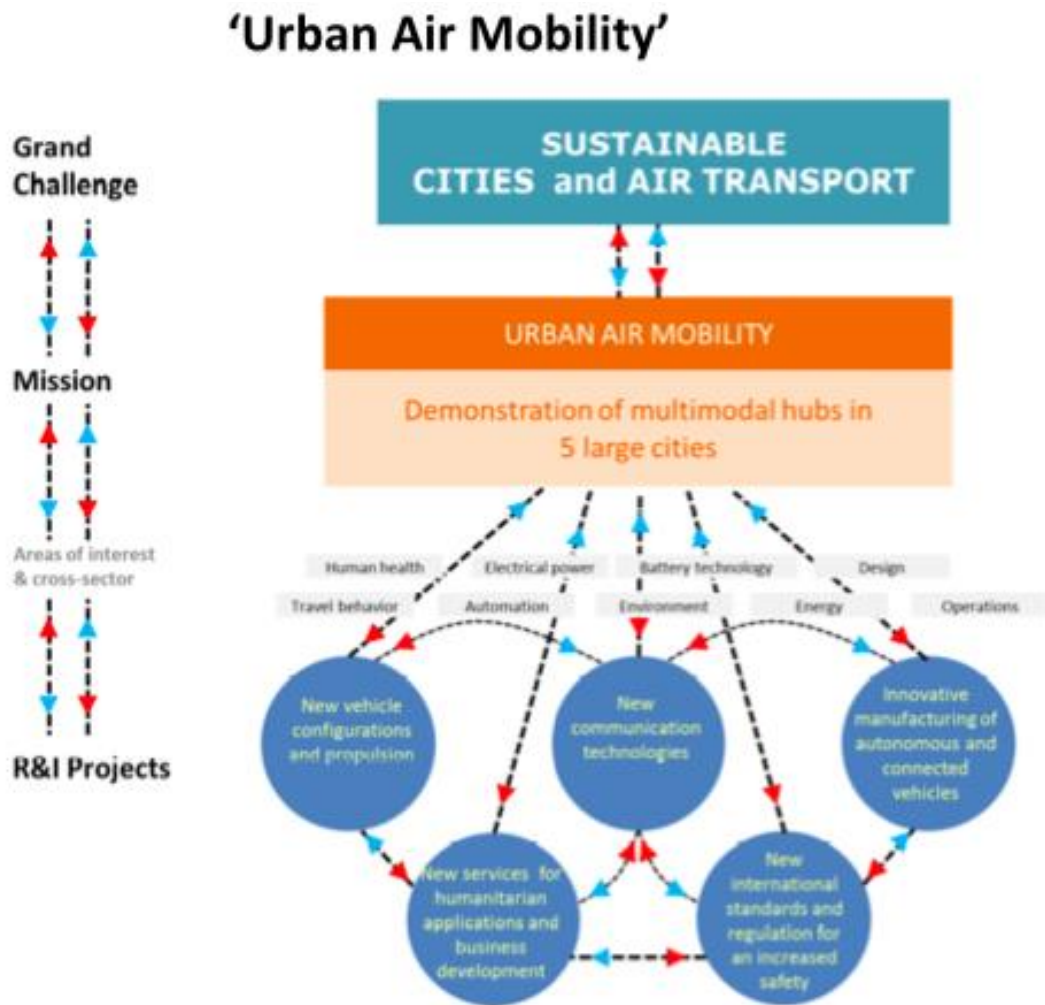
4 Quotations:

122.1. 153:2 Quotation 153:2

Coding:

- 4.5 Communities and cities
- 4.6 Industrial competitiveness in transport
- 4.8 Smart mobility
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:



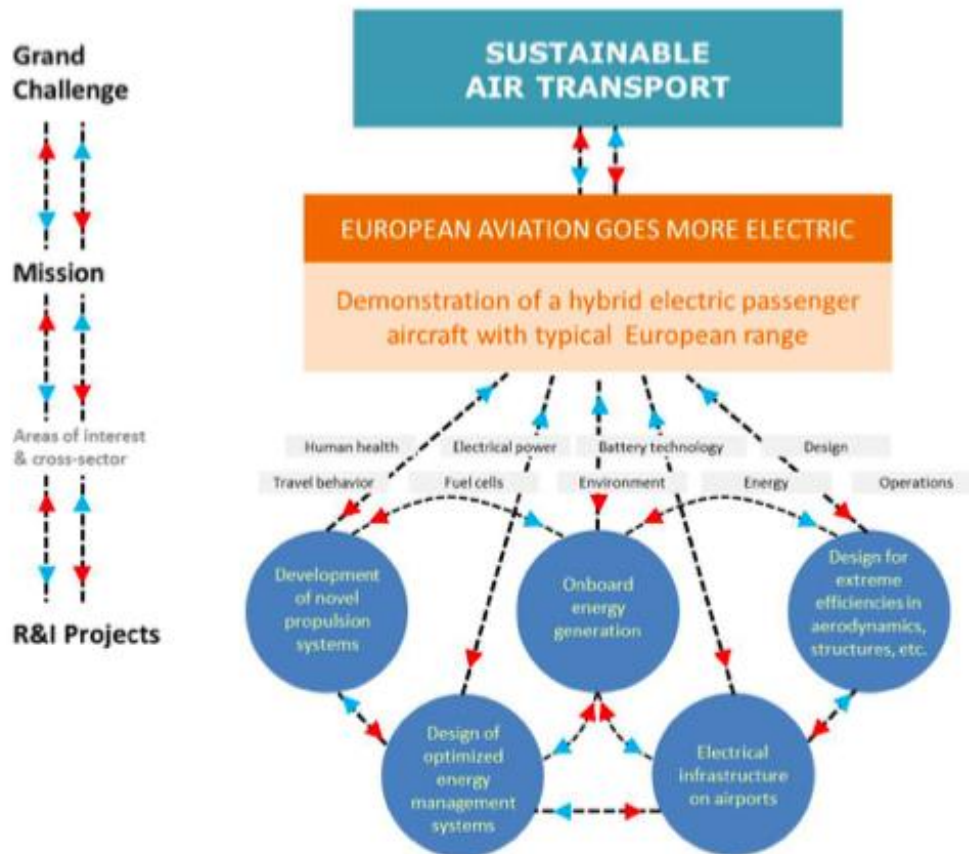
122.2. 153:3 Quotation 153:3

Coding:

- 4.6 Industrial competitiveness in transport
- 4.7 Clean transport and mobility
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

'European aviation goes more electric'



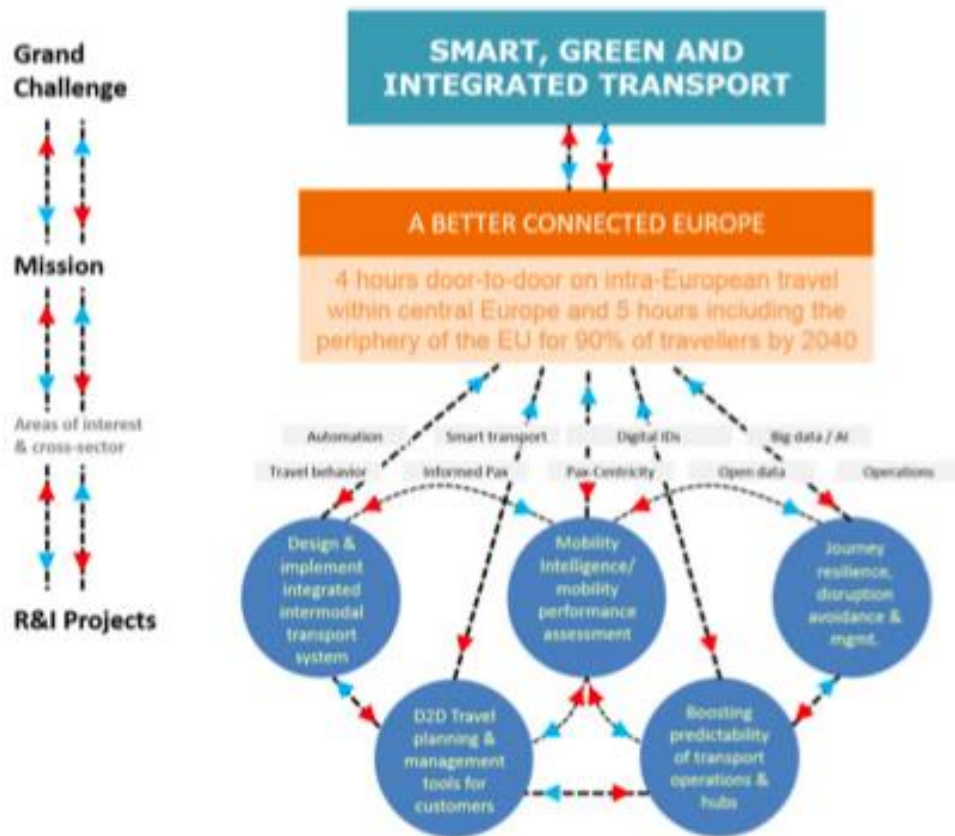
122.3. 153:4 'A better connected Europe' 4 hours door-to-door on intra-European travel within central Europe and 5...

Coding:

- 4.7 Clean transport and mobility
- 4.8 Smart mobility
- SDG 9_ Industry, innovation and infrastructure
- SDG 11_ Sustainable cities and communities

Content:

'A better connected Europe' 4 hours door-to-door on intra-European travel within central Europe and 5 hours including the periphery of the EU for 90% of travellers by 2040'



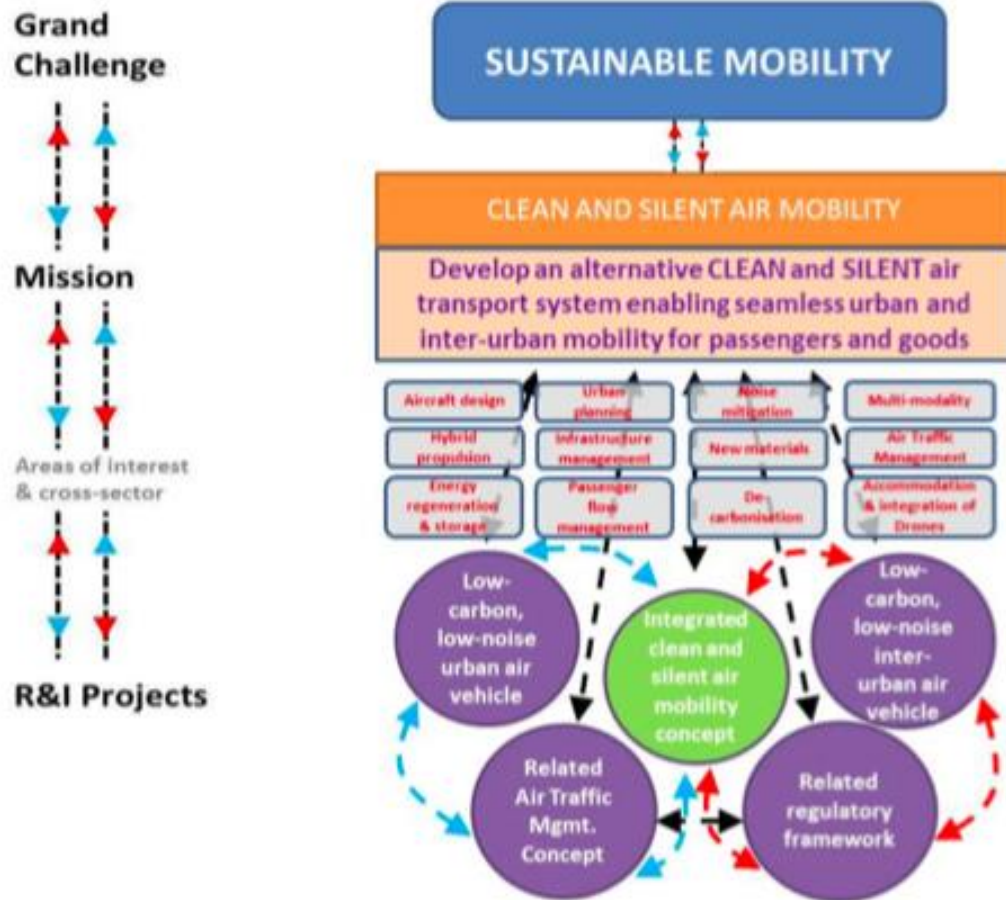
122.4. 153:5 Quotation 153:5

Coding:

- 4.5 Communities and cities
- 4.7 Clean transport and mobility
- 4.8 Smart mobility
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

'Clean and silent air mobility'



123. 123 O_4

1 Quotations:

123.1. 154:2 A GHG-free European energy system until 2050 & strengthening European competitiveness at the same ti...

Coding:

- 3.8 Low carbon and clean industry
- 4.2 Energy supply
- 4.3 Energy systems and grids
- 4.7 Clean transport and mobility
- 4.9 Energy storage
- 5.3 Agriculture, forestry and rural areas
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 12_Responsible consumption and production

Content:

A GHG-free European energy system until 2050 & strengthening European competitiveness at the same time

124. 124 O_5

5 Quotations:

124.1. 155:4 Reconversion of industrial sites Abandoned industrial areas, reclaimed or not used, can be re-launch...

Coding:

- 3.8 Low carbon and clean industry
- 4.4 Buildings and industrial facilities in energy transition
- SDG 9_Industry, innovation and infrastructure

Content:

Reconversion of industrial sites

Abandoned industrial areas, reclaimed or not used, can be re-launched through the implementation of energy generation plants with zero emissions. Rehabilitated and decontaminated, these sites have the potential to house new renewable energy technologies creating new opportunities in the energy sector and re-launching the sites with large-scale initiatives, investing in the territory and creating jobs.

124.2. ⓘ 155:5 *Bridge to a renewable future Natural gas is the most ecological and efficient fossil fuel. This mean...*

Coding:

- 3.8 Low carbon and clean industry
- 4.2 Energy supply
- 4.4 Buildings and industrial facilities in energy transition
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure

Content:

Bridge to a renewable future

Natural gas is the most ecological and efficient fossil fuel. This means that it can be considered a key player in the transition of the energy mix from the current one, based mainly on the use of fossil fuels, to a future mix based fundamentally on renewable energies. By increasing the amount of gas used, compared to fossil sources, a significant reduction in CO2 emissions can be obtained quickly. Carbon Capture Sequestration and Utilization technologies can further add environmental value to the use of natural gas, by converting produced CO2 to usable products. In addition, advanced materials for enhancing renewables performances (higher efficiencies, lower costs) can be developed along with materials for the storage of renewable energy under chemical form, in order to further promote the broad adoption of renewables.

124.3. ⓘ 155:6 *Digitalized distribution grids: the key enabler of the future power eco-system More flexible distrib...*

Coding:

- 4.3 Energy systems and grids
- 4.4 Buildings and industrial facilities in energy transition
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

Digitalized distribution grids: the key enabler of the future power eco-system

More flexible distribution grids. Increasingly larger fractions of the network will need to be automated and equipped with intelligent monitoring, control and protection systems coupled with distributed and massive energy storage systems. In parallel, urban buildings and services must be able to accommodate the distributed generation systems and the infrastructures necessary for e-mobility. Given a time horizon of five years, the objectives of the mission could be declined in terms of km of network and/or number of inhabitants invested by the digital transformation.

124.4. ⓘ 155:7 *Sustainable Mobility with a local and global approach*


Coding:

- 4.6 Industrial competitiveness in transport
- 4.7 Clean transport and mobility
- 4.8 Smart mobility

- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

Sustainable Mobility with a local and global approach

124.5.  155:8 *This challenge and related missions are crucial for ensuring security in digital communications of c...*

Coding:


- 2.6 Cybersecurity
- 3.2 Digital technologies
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

This challenge and related missions are crucial for ensuring security in digital communications of citizens and industrial networks. Actually the Association is still working on the definition of coherent missions under co-ordinated policies for civil and military technologies (dual technologies).

125.  **125 O_6**

5 Quotations:

125.1.  156:1 *Extract Value from Next Generation Digital Infrastructure (5G, HPC, Cloud, IoT, Big Data, Edge Compu...*

Coding:

- 3.2 Digital technologies
- 3.4 Artificial intelligence and robotics
- 3.5 Next generation Internet
- 3.6 High performance computing and Big Data
- SDG 9_Industry, innovation and infrastructure

Content:

Extract Value from Next Generation Digital Infrastructure (5G, HPC, Cloud, IoT, Big Data, Edge Computing and AI)


125.2.  156:2 *Next-Generation Data and Artificial Intelligence Platforms*

Coding:

- 3.4 Artificial intelligence and robotics
- SDG 9_Industry, innovation and infrastructure

Content:

Next-Generation Data and Artificial Intelligence Platforms

125.3.  156:3 *Trust in Data-Driven Critical Decision Making*

Coding:

- 2.3 Social and economic transformations
- 2.6 Cybersecurity
- 3.4 Artificial intelligence and robotics
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

Trust in Data-Driven Critical Decision Making

125.4.  156:4 *Scaling Industrial Cooperation Models in the Data Economy*

Coding:

- 2.3 Social and economic transformations
- 3.2 Digital technologies
- 3.4 Artificial intelligence and robotics
- 3.6 High performance computing and Big Data
- SDG 8_Decent work and economic growth
- SDG 9_Industry, innovation and infrastructure

Content:

Scaling Industrial Cooperation Models in the Data Economy

125.5. 🗨️ 156:5 *Data Skills and Know-How*

Coding:

- 2.3 Social and economic transformations
- 3.2 Digital technologies
- SDG 4_Quality education
- SDG 8_Decent work and economic growth
- SDG 9_Industry, innovation and infrastructure

Content:

Data Skills and Know-How

126. 📄 126 O_7

5 Quotations:

126.1. 🗨️ 157:1 *smart storage, transmission, distribution, and energy system integration*

Coding:

- 4.3 Energy systems and grids
- 4.9 Energy storage
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure

Content:

smart storage, transmission, distribution, and energy system integration

126.2. 🗨️ 157:2 *renewable and sustainable plastics*

Coding:

- 3.7 Circular industries
- 3.8 Low carbon and clean industry
- SDG 12_Responsible consumption and production

Content:

renewable and sustainable plastics

126.3. 🗨️ 157:3 *zero-carbon and sustainable construction materials (zero-carbon cement, wood, composites)*

Coding:

- 4.4 Buildings and industrial facilities in energy transition
- 5.6 Bio-based innovation systems
- SDG 11_Sustainable cities and communities
- SDG 12_Responsible consumption and production

Content:

zero-carbon and sustainable construction materials (zero-carbon cement, wood, composites)

126.4. 🗨️ 157:4 *European soils as carbon sinks*

Coding:

- 4.1 Climate science and solutions
- 5.2 Biodiversity and natural capital
- SDG 13_Climate action
- SDG 15_Life on land

Content:

European soils as carbon sinks

126.5. 🗨️ 157:5 *Climate-neutral, "circular" and liveable cities, also through social innovation (includes electromob...*

Coding:

- 3.2 Digital technologies
- 4.4 Buildings and industrial facilities in energy transition
- 4.5 Communities and cities
- 4.7 Clean transport and mobility
- 5.7 Circular systems
- SDG 7_Affordable and clean energy
- SDG 9_Industry, innovation and infrastructure
- SDG 11_Sustainable cities and communities

Content:

Climate-neutral, "circular" and liveable cities, also through social innovation (includes electromobility, energy-plus housing, smart solutions, digitisation, closer loops, etc.)

127. 📄 127 O_8

1 Quotations:

127.1. 🗨️ 160:1 *Innovative Healthtech Solutions for Sustainable and Equitable Health and Wellbeing for All*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Innovative Healthtech Solutions for Sustainable and Equitable Health and Wellbeing for All

128. 📄 128 O_9

1 Quotations:

128.1. 🗨️ 161:1 *Transforming patient outcome and healthcare sustainability by providing innovative increasingly data...*

Coding:

- 1.5 Tools, technologies and digital solutions for health
- 1.6 Health care systems
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

Transforming patient outcome and healthcare sustainability by providing innovative increasingly data driven global healthtech solutions

129. 📄 129 O_10

1 Quotations:

129.1. 🗨️ 162:1 *Sustainable Healthy: Europe's Future in Food By 2030 75% of all Europeans will choose healthy and su...*

Coding:


- 1.2 Environmental and social health determinants
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- 5.7 Circular systems
- SDG 2_Zero hunger
- SDG 3_Good health and well-being for people
- SDG 12_Responsible consumption and production

Content:

Sustainable Healthy: Europe's Future in Food

By 2030 75% of all Europeans will choose healthy and sustainable diets, provided through climate-smart, resource efficient, circular production generating 50% less waste and using 40% less resources. Building on Europe's great diversity and richness in food culture and production, citizens, producers and processors will be engaged to transform the food system to make it sustainable and to empower EU citizens to attain safe, healthy & sustainable diets

130.  130 O_11**1 Quotations:**

130.1.  164:1 *ESTABLISHING A GEOLOGICAL SERVICE FOR EUROPE* The mission of the 48 partners of GeoERA The availabili...

Coding:

- 4.2 Energy supply
- 5.2 Biodiversity and natural capital
- SDG 6_Clean water and sanitation
- SDG 7_Affordable and clean energy
- SDG 15_Life on land

Content:

ESTABLISHING A GEOLOGICAL SERVICE FOR EUROPE

The mission of the 48 partners of GeoERA

The availability, accessibility, and recoverability of minerals, metals, water, energy and other subsurface resources are more than ever a crucial issue in nowadays society.

131.  131 O_12**1 Quotations:**

131.1.  166:1 *AFFORDABLE VACCINES FOR ALL*

Coding:

- 1.4 Infectious diseases
- SDG 1_No poverty
- SDG 3_Good health and well-being for people

Content:

AFFORDABLE VACCINES FOR ALL

132.  132 O_13**1 Quotations:**

132.1.  167:1 *A healthy, sustainable diet for all citizens in 2030*


Coding:

- 1.2 Environmental and social health determinants
- 1.3 Non-communicable and rare diseases
- 5.5 Food systems
- SDG 2_Zero hunger
- SDG 3_Good health and well-being for people

Content:

133.  **133 O_14**

4 Quotations:


133.1.  168:3 *By 2030 transform our society into a circular economy by greening marine and maritime industries thr...*

Coding:

- 5.4 Sea and oceans
- 5.7 Circular systems
- SDG 12_Responsible consumption and production
- SDG 14_Life below water

Content:

By 2030 transform our society into a circular economy by greening marine and maritime industries through a holistic approach, achieving zero entry of pollutants and hazardous emissions to and from water, debris, noise and new marine and finally 20% reduced emissions of greenhouses gases, debris by EU and Associated partners to seas and oceans and coastal areas.


133.2.  168:4 *The internet of the Oceans by 2030 Radical technological breakthroughs in terms of automation, monit...*

Coding:

- 3.2 Digital technologies
- 5.4 Sea and oceans
- SDG 9_Industry, innovation and infrastructure
- SDG 15_Life on land

Content:

The internet of the Oceans by 2030 Radical technological breakthroughs in terms of automation, monitoring and modeling, will transform our abilities and capacities to securely enable sustainable human activities in coasts, seas and the ocean by 2050 in a sustained way with 20 % increase in efficiency in services delivered for maritime economy.


133.3.  168:5 *Safeguard all coastal population, coastal marine and maritime activities and areas endangered by nat...*

Coding:

- 2.4 Disaster-resilient societies
- 5.1 Environmental observation
- 5.4 Sea and oceans
- SDG 11_Sustainable cities and communities
- SDG 14_Life below water
- SDG 15_Life on land

Content:

Safeguard all coastal population, coastal marine and maritime activities and areas endangered by natural disasters by 2030.

133.4.  168:6 *By 2030 Europe will be selfsustained with seafood and target a 30% circular economy increase in Euro...*


Coding:

- 3.7 Circular industries
- 5.4 Sea and oceans
- 5.5 Food systems
- 5.7 Circular systems
- SDG 2_Zero hunger
- SDG 12_Responsible consumption and production
- SDG 14_Life below water

Content:

By 2030 Europe will be self-sustained with seafood and target a 30% circular economy increase in European blue bioproduction with an overall 10% reduced footprint, from current level.

134.  134 O_15**2 Quotations:**


134.1.  169:1 *Democratisation of AI and ethical use of data* - Creating a democratic and ethically sustainable AI...*

Coding:

- 2.1 Democracy
- 2.6 Cybersecurity
- 3.2 Digital technologies
- 3.4 Artificial intelligence and robotics
- SDG 9_Industry, innovation and infrastructure
- SDG 16_Peace, justice and strong institutions

Content:

Democratisation of AI and ethical use of data* - Creating a democratic and ethically sustainable AI and data ecosystem for Europe

134.2.  169:2 *Sustainable Arctic*

Coding:

- 4.1 Climate science and solutions
- 5.1 Environmental observation
- 5.2 Biodiversity and natural capital
- SDG 13_Climate action
- SDG 15_Life on land

Content:

Sustainable Arctic

135.  135 O_16**1 Quotations:**

135.1.  172:1 *Double productivity Europe wide in 20 years – the “2 by 20” mission*


Coding:

- 2.3 Social and economic transformations
- 3.1 Manufacturing technologies
- 3.4 Artificial intelligence and robotics
- SDG 4_Quality education
- SDG 8_Decent work and economic growth

Content:

Double productivity Europe wide in 20 years – the “2 by 20” mission

136.  136 O_17**1 Quotations:**

136.1.  173:1 *Europe at work in 2030 – in search of a new narrative The need to intensify and focus research on th...*

Coding:


- 2.3 Social and economic transformations
- SDG 8_Decent work and economic growth

Content:

Europe at work in 2030 – in search of a new narrative The need to intensify and focus research on the new Concept of Work

137. 137 O_18

1 Quotations:

137.1.  174:2 *a separate "mission" on the current social and cultural challenges of Europe. It could be supported...*

Coding:


- 2.1 Democracy
- 2.2 Cultural heritage
- 2.3 Social and economic transformations
- SDG 8_Decent work and economic growth
- SDG 10_Reducing inequalities
- SDG 16_Peace, justice and strong institutions

Content:

a separate "mission" on the current social and cultural challenges of Europe. It could be supported by placing a specific emphasis on Socio-Economic Sciences, Arts and Humanities (SSAH) research, more ambitious and inclusive than only Socio-Economic Sciences and Humanities (SSH) focus.

138. 138 O_19

1 Quotations:

138.1.  175:1 *pain research is the ideal candidate for a mission-oriented approach that the Commission plans to ad...*

Coding:


- 1.1 Health throughout the life course
- 1.3 Non-communicable and rare diseases
- SDG 3_Good health and well-being for people

Content:

pain research is the ideal candidate for a mission-oriented approach that the Commission plans to adopt in the upcoming FP9. In fact, given its crosscutting nature, pain should be considered as a quality indicator for the achievement of many health missions such as increase of healthy lifespan and life quality of cancer survivors.

139. 139 O_20

1 Quotations:

139.1.  176:2 *By 2050, European forests are the foundation for a market driven, circular bio-based economy, as a s...*

Coding:


- 5.3 Agriculture, forestry and rural areas
- 5.6 Bio-based innovation systems
- SDG 12_Responsible consumption and production
- SDG 15_Life on land

Content:

By 2050, European forests are the foundation for a market driven, circular bio-based economy, as a source for bio-based products and services, through a value adding, efficient and environmentally friendly wood supply, including efficient cascading use.

140. 140 O_21

1 Quotations:


140.1.  177:1 *Mission for the transformation of European food and farming systems towards sustainability by 2030 w...*


Coding:

- 1.2 Environmental and social health determinants
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- 5.7 Circular systems
- SDG 2_Zero hunger
- SDG 3_Good health and well-being for people
- SDG 12_Responsible consumption and production

Content:

Mission for the transformation of European food and farming systems towards sustainability by 2030 with at least 50 % agroecological and organic agriculture

141.  **141 NGO_10****1 Quotations:**

141.1.  178:1 *A European Cancer Plan for Children and Adolescents' includes specific objectives and implementati...*

Coding:

- 1.1 Health throughout the life course
- 1.3 Non-communicable and rare diseases
- 1.5 Tools, technologies and digital solutions for health
- SDG 3_Good health and well-being for people
- SDG 9_Industry, innovation and infrastructure

Content:

A European Cancer Plan for Children and Adolescents' includes specific objectives and implementation platforms to achieve the mission of delivering more and better cure for paediatric cancer.

142.  **142 O_22****1 Quotations:**

142.1.  179:1 *TO TRANSFORM THE AGRI-FOOD SECTOR IN EUROPE INTO A COMPETITIVE, SUSTAINABLE AND TRUSTED SECTOR, SECU...*


Coding:

- 1.2 Environmental and social health determinants
- 5.3 Agriculture, forestry and rural areas
- 5.5 Food systems
- 5.7 Circular systems
- SDG 2_Zero hunger
- SDG 3_Good health and well-being for people
- SDG 12_Responsible consumption and production

Content:

TO TRANSFORM THE AGRI-FOOD SECTOR IN EUROPE INTO A COMPETITIVE, SUSTAINABLE AND TRUSTED SECTOR, SECURING THE PRODUCTION OF SAFE, NUTRITIOUS FOOD THAT EVERY CONSUMER LOVES.

143.  **143 U_28****5 Quotations:**

143.1.  72:7 *Achieving health and quality of life across the life course.*

Coding:

- 1.1 Health throughout the life course
- SDG 3_Good health and well-being for people

Content:

Achieving health and quality of life across the life course.

143.2. ☰ 72:8 *Access and equity –Fundamental to service delivery are questions of equality, both of access and out...*

Coding:

- 2.3 Social and economic transformations
- SDG 10_Reducing inequalities

Content:

Access and equity –Fundamental to service delivery are questions of equality, both of access and outcomes.

143.3. ☰ 72:9 *Mobility and Migration – This mission will look to enable and understand the cultural, social and ec...*

Coding:

- 2.2 Cultural heritage
- 2.3 Social and economic transformations
- SDG 8_Decent work and economic growth
- SDG 10_Reducing inequalities

Content:

Mobility and Migration – This mission will look to enable and understand the cultural, social and economic contribution of migrants and changing mobility

143.4. ☰ 72:10 *Skills/work – new technologies will lead to structural changes in the labour market, and human and p...*

Coding:

- 2.3 Social and economic transformations
- SDG 4_Quality education
- SDG 8_Decent work and economic growth

Content:

Skills/work – new technologies will lead to structural changes in the labour market, and human and political agency.

143.5. ☰ 72:11 *Resilience and planning for uncertainty - The world is facing large scale uncertainty regarding envi...*

Coding:

- 2.3 Social and economic transformations
- 2.4 Disaster-resilient societies
- SDG 16_Peace, justice and strong institutions

Content:

Resilience and planning for uncertainty - The world is facing large scale uncertainty regarding environmental, technological and political change, which in turn can make people feel uncertain and unheard.

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This analysis report provides an overview of the responses to the call for feedback on the report “Mission-Oriented Research and Innovation in the European Union” by Mariana Mazzucato, written at the request of European Commissioner for Science, Research and Innovation Carlos Moedas.

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