SET PLAN ACTIONS

Implementation process and expected outcomes

Goals to achieve
To translate the 10 key actions of the SET Plan\(^1\) into specific recommendations for R&I actions and/or policy measures to be implemented at regional, national and European levels. These recommendations will have to consider the needs of the energy system as a whole, i.e. integration aspects will have to be embedded in each of the 10 key actions.

For each of these actions, these recommendations will be instrumental for the SET Plan Steering Group\(^2\) to define: a) the level of ambition (in terms of priorities and funding); b) modalities of implementation and c) expected deliverables and timing to achieve results.\(^3\)

Step by step
1- The EC establishes a **rolling agenda** for SET Plan Steering Group meetings in which all the 10 key actions are to be discussed and decisions taken on priority setting and implementation. Each action will be discussed as often as necessary in order to review progress and discuss possible adjustments, in principle at least once per year.

2- For each meeting, on the basis of the Integrated Roadmap\(^4\) and the Energy Union priorities\(^5\), and with the objective to prioritise the SET Plan actions, the EC prepares **issues papers**. These papers aim to trigger the discussions towards agreed targets/priorities and implementation measures including related R&I actions and/or policy measures.

3- Once finalised by the EC, the issues papers will be published on SETIS website\(^6\) in order for all interested stakeholders to provide their comments and inputs.

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\(^2\) The SET Plan Steering Group is the governing body of the SET Plan. It gathers representatives of the EU Member States, Iceland, Norway, Switzerland and Turkey. Delegates are from the Ministries in charge of Energy and Research. The Steering Group is chaired by the EC.


\(^5\) [https://ec.europa.eu/priorities/energy-union/docs/energyunion.pdf](https://ec.europa.eu/priorities/energy-union/docs/energyunion.pdf)

4- In addition, the issues papers will be sent, by email, to selected stakeholders. The selection of stakeholders is done on the basis of the Integrated Roadmap development process and stakeholders involved at that time but may also involve new stakeholders. The selection will depend on the items addressed in the issues paper(s). The issues papers will also be sent to the Steering Group members.

5- All stakeholders are asked to respond within a given timeframe in the form of (short) input papers which will be shared with the SET Plan Steering Group. The input papers will have to take position on the priorities/targets proposed in the issues paper. They shall represent the consolidated view of each technology sector/platform/organisation consulted unless this is not possible in which case the majority and minority positions should be provided. Consulted stakeholders are strongly encouraged to organise themselves accordingly.

The consultation process will take place in two stages. Details on the expected outcomes for these different stages are provided in Annex II

In the first stage, the expected outcomes are the following:

<table>
<thead>
<tr>
<th>Main expected outcome</th>
<th>To make specific recommendations on the priorities/targets proposed in the issues paper(s).</th>
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<td>If possible, other expected outcome</td>
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<td>If possible, other expected outcome</td>
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6- The EC analyses the input papers received from the stakeholders.

7- The EC will inform those stakeholders who will be invited to the SET Plan Steering Group meeting, where the key actions addressed in the issues papers will be discussed. The invitation will be based on the inputs received, on the relevance of stakeholders for the delivery of the targets. Strong attention will be paid to the representative nature of the different views expressed, if any. Given the importance of such targets/priorities, the EC will also seek to invite an appropriate level of participants while being representative for the sector as a whole.

8- Based on the inputs provided by the stakeholders and the discussions in the Steering Group meeting, it is the intention to come to a common agreement between stakeholders (research organisations, industry, Member States and the EC) on the targets/priorities.

9- The Steering Group will then define the level of ambition for the SET Plan actions.

Then we will move to the second stage where the relevant stakeholders will be asked to contribute to a joint implementation plan in order to deliver the priorities/targets set by the Steering Group.
In the **second stage**, the expected outcomes are the following:

<table>
<thead>
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<th>Main expected outcome</th>
<th>To propose concrete implementation actions, related funding, expected deliverables and timeline for achieving results</th>
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<td>If possible, other expected outcome</td>
<td>To react to EC’s recommendations on international cooperation.</td>
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**Link between Energy Union and the SET Plan 10 key actions:**

The priorities set for the SET Plan 10 key actions and the progress made on the implementation of these key actions will be made visible in the annual reporting of the State of the Energy Union. Each year the governance of the Energy Union will provide an analysis of the situation, recommendations and monitoring of their implementation.
ANNEX I
Energy Union priorities / Research and Innovation and Competitiveness SET Plan related actions

- **Core priority 1: Number 1 in renewable energy:**
  - Action 1: Sustain technological leadership by developing highly performant renewable technologies and their integration in the EU's energy system;
  - Action 2: Reduce the cost of key technologies.

- **Core priority 2: The future smart EU energy system, with the consumer at the centre:**
  - Action 3: Create technologies and services for smart homes that provide smart solutions to energy consumers;
  - Action 4: Increase the resilience, security and smartness of the energy system.

- **Core priority 3: Develop and strengthen energy-efficient systems:**
  - Action 5: Develop new materials and technologies for, and the market uptake of, energy efficiency solutions for buildings;
  - Action 6: Continue efforts to make EU industry less energy intensive and more competitive.

- **Core priority 4: Diversify and strengthen energy options for sustainable transport:**
  - Action 7: Become competitive in the global battery sector to drive e-mobility forward;
  - Action 8: Strengthen market take-up of renewable fuels needed for sustainable transport solutions.

- **Additional priority 1: Driving ambition in carbon capture storage and use deployment:**
  - Action 9: Step up research and innovation activities on the application of carbon capture and storage (CCS) and the commercial viability of carbon capture and use (CCU).

- **Additional priority 2: Increase safety in the use of nuclear energy:**
  - Action 10: Maintaining a high level of safety of nuclear reactors and associated fuel cycles during operation and decommissioning, while improving their efficiency.
ANNEX II
The expected outcomes

The stakeholders’ consultation will be organised in two stages. You will find below a set of questions for each expected outcome. These questions are meant to guide you in your answers. **Answers to the questions underlined below are essential for the EC. Each input should be duly substantiated and as much as possible supported with facts and figures.**

<table>
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<th>STAGE 1</th>
<th>AGREEMENT ON TARGETS/ PRIORITIES</th>
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**For the main expected outcome: To make specific recommendations on the priorities/targets proposed in the issues paper(s)**

- Do you agree with the targets set in the issue paper?
- Do you think that the level of ambition is correct?
- Are there any standing issue(s) in the way to reaching the proposed targets/priorities?

It may be useful to understand the broader context in which these targets/priorities need to be achieved. If possible, we suggest that the following is addressed as well:

- What are your specific recommendations on prioritising R&I activities on these issues (and building where appropriate on relevant existing initiatives)?
- Who are the best placed actors to implement the targets/priorities (Industry, EU, Member States, regions, groups of countries/organisations/etc.),?

**If possible, to identify possible gaps/barriers & areas of cooperation on the priorities/targets proposed in the issues paper(s).**

- Identify possible barriers (when not done already in the Integrated Roadmap) related to regulation, cooperation issues, standardisation / industrialisation / manufacturing, socio-economics, etc.
- Identify possible gaps or duplication of efforts in the R&I priorities (based on the Integrated Roadmap);
- Identify priorities where there is scope for and benefit in more coordination and/or cooperation across EU, Member States, regions, Research Institutions and/or industry;
Identify best practices of past or present coordination and/or cooperation that can be used as an example or as a starting point.

### STAGE 2

**ESTABLISHMENT OF A JOINT IMPLEMENTATION PLAN**

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**For the main expected outcome:** To propose concrete implementation actions, related funding, expected deliverables and timeline for achieving results

- Identify actions and specific stakeholders needed to implement the targets/priorities
- Identify related funding (based on a sound analysis of needs)
- Identify the expected deliverables and the timing to achieve results

The following can also be addressed:

- Identify possible partners beyond the energy R&I community to be involved.
- Suggest ad hoc structures or projects where R&I actors in interested Member States could work together.

**If possible, to react to EC’s recommendations on international cooperation.**

For each of the actions, and on the basis of the Integrated Roadmap and other relevant inputs, the EC will prepare risk/opportunity analysis with recommendations for cooperation with strategic partners and key countries/regions.

Stakeholders will be invited to give feedback, to identify concrete actions of EU common interest in areas where creating synergies with research and industrial institutions outside Europe is needed/helpful to achieve significant progress, address a knowledge gap or create new market opportunities outside Europe.