

The New Strategic Energy Technology Plan: Accelerating the European Energy System Transformation



Paris, 10 December 2015,

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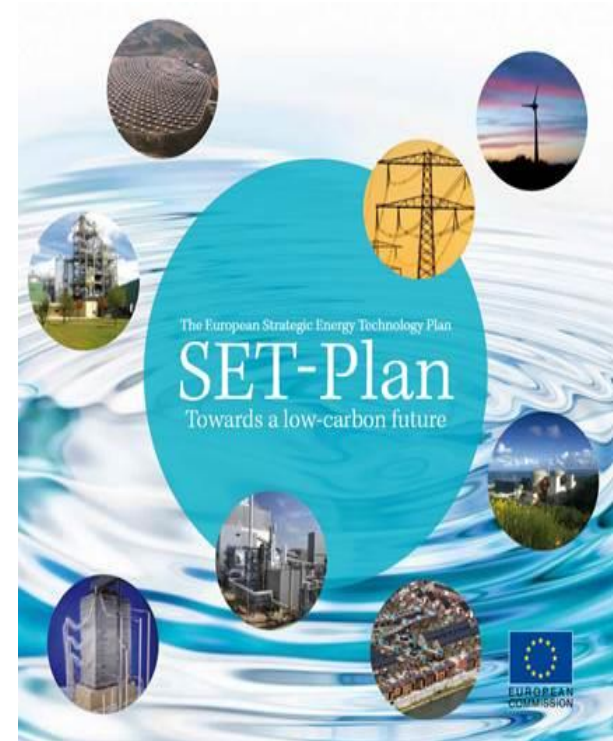
History: The SET Plan in 2008

- **A first broad coalition of stakeholders**
- **Link to policy agenda**

Objectives for 2020

- 20% reduction of CO2 emissions (ref. 1990)
- 20% share of renewable energy [of EU energy consumption]
- 20% improvement in Energy Efficiency

- **Focus on technologies**



Key Principles

➤ New policy challenges

Objectives for 2030

- 40% reduction of CO₂ emissions (Ref. 1990)
- 27% share of renewable energy [of EU energy consumption]
- 27% improvement in Energy Efficiency

➤ From technology sectors to energy system

➤ Keep technology options open

➤ Reinforce the implementation of actions beyond EU-funded projects



"Towards an Integrated Roadmap", December 2014

- Active consumer
 - Demand focus (energy efficiency)
 - System optimisation
 - Supply
-
- New integrated approach – going beyond technology silos
 - First time – a comprehensive European energy R&I agenda for solutions to cost-effectively accelerate the energy transition

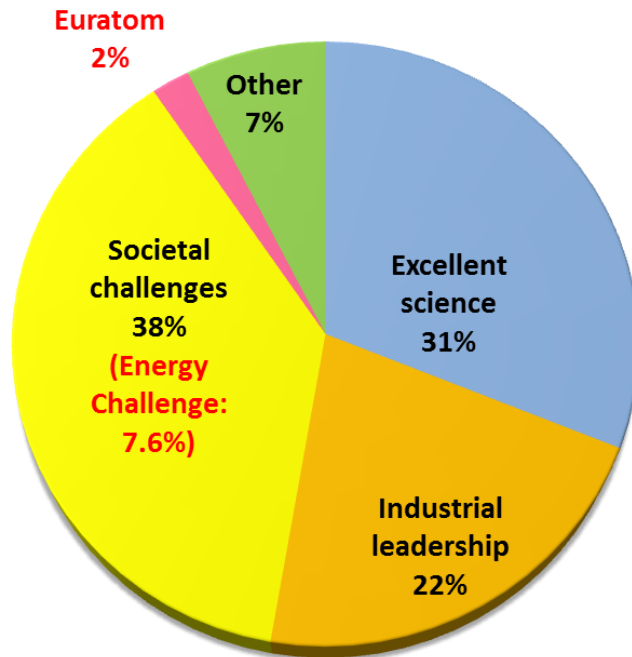
Strategic Energy Technology (SET) Plan

Towards an Integrated Roadmap:
Research & Innovation Challenges and Needs
of the EU Energy System



<https://setis.ec.europa.eu/set-plan-process/integrated-roadmap-and-action-plan>

Horizon 2020 – Overall budgets



Total budget H2020: EUR 74,83 B€

Budget of the Energy Challenge:

EUR 5,69 B€

Twice that of the period 2006-2013

35% of the total H2020 budget is climate action relevant

Energy R&I Challenges



Efficiency/leverage of public sector investments



Moving beyond the national dimension – the issues are too big for a single country



Integration of technological, socio-economic, financial, and regulatory aspects



Creating market pull to stimulate investments already at R&I phase – the "Valley of Death"



Energy system integration - The consumer



The Integrated SET Plan priorities

Energy Union Priorities

No1 in Renewables

Smart EU energy system,
with consumer at the
centre

Efficient energy systems

Sustainable transport

CCS

Nuclear energy use

Ten Actions to accelerate the Energy System Transformation

1. Performant renewable technologies
integrated in the system

2. Reduce costs of technologies

3. New technologies & services for consumers

4. Resilience & security of energy system

5. New materials & technologies for buildings

6. Energy efficiency for industry

7. Competitive in global battery sector (e-mobility)

8. Renewable fuels

9. Drive ambitions in CCS+U deployment

10. Increase safety



1. Strengthened cooperation

- ## 2. More coordination between Members States

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The Integrated SET Plan management

Method

3. Transparency, indicators and periodic reporting

- Annual KPIs:
 - Level of investments – public and private sector
 - Trends in patents
 - Number of researchers active in the sector
- Every 2 years, progress will be measured:
 - Technology developments
 - Cost reduction
 - Systemic integration of new technologies
- Yearly State of the Energy Union Report

4. Monitoring and knowledge sharing

- Strengthening SETIS (Strategic Energy Technology Information System)

<https://ec.europa.eu/jrc/en/news/new-strategic-energy-technology-plan-set-plan-communication>



The Integrated SET Plan CONCLUSIONS

- **Clearer prioritisation**
- **Precise strategic targets in priority areas**
- **Better identification of gaps, duplication and synergies at EU and national level**
- **Action-orientation**
- **Energy systems approach**
- **Technical, socio-economic, legal, financial issues**

***Thank you
for your attention***

For further detail:

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