

European Strategic Energy Technology Plan (SET-Plan)

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Why we needed a SET-Plan

Technology is vital to achieve our policy objectives

- Today we are falling short
 - not on a pathway to meet our policy objectives
 - insufficient energy research budgets in the EU
- Intrinsic weakness in energy innovation
 - Iong lead times, incumbent technologies, system inertia
 - no natural market appetite for new energy technologies
- Time is of the essence
 - decisions taken now will have lasting consequences
 - cost of inaction will be much higher in the long run



Achieving the political vision

- First and foremost, energy efficiency
- 2020 targets: reinforced research and proactive support measures
- 2050 vision: develop new generation of technologies through breakthroughs
- A collective endeavour to deliver results
- Actions for industry, Member States, the European Community and at global level







European Industrial Initiatives

- Fuel cells and hydrogen (JTI on-going)
- Fusion (ITER on-going)

new European Industrial Initiatives:

- European Wind Initiative
- Solar Europe Initiative
- Bio-energy Europe Initiative
- European Electricity Grid Initiative
- European CO2 capture, transport and storage initiative
- Sustainable fission initiative (Gen IV)

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EII key features

- Led by industry
- Boost research and innovation
- Accelerate development and deployment of technology
- Define & realise clear targets (quantified objectives)
- Deliver progress <u>beyond business-as-usual</u>
- Contribute to political goals
- Foster Public Private Partnerships



- First decide on the objectives and activities
- Finance & structure based on the objectives and activities
- Monitoring the progress Key Performance Indicators
- No single, pre-determined model and structure of implementation

 \succ Timeline for setting up the initiative: 1 – 2 years





Why do we need the Alliance?

To tackle fragmentation and optimise resources:

- The National Research Institutes represent a huge resource for Europe, both in terms of researchers and facilities;
- BUT, even if they pursue similar objectives, they define strategies and work plans individually;
- Sub-critical teams working on the same technologies, scattered across Europe (problem of duplication);
- Collaboration at EU level on a project-by-project basis – adhoc rather than systematic
- > We need a different model of cooperation

EUROF COMMIS

A two-level structure

• Core Group:

- Driving the process
- Limited number of major players to remain operational
- Supported by a Secretariat using own resources
- Programme Level:
 - Starting point: putting 'own resources' together to create joint programmes (variable geometry)
 - Identifying the gaps and need for additional resources
 - Open to all that can bring in real implementing capacity







New knowledge for developing technologies and changing, adapting existing infrastructure in the mid term, opening new avenues in the LT





Community actions on financing

- Strengthening the European research base
 - Joint Programming from projects to programmes
 - European Energy Research Alliance
- Leveraging industrial investment
 - European Industrial Initiatives
 - European demonstrators
- Overcoming the 'valley of death'
 - Reinforced Risk Sharing Finance Facility
- Facilitating global solutions
 - Mechanisms/instruments for joint programmes



AN ENERGY POLICY FOR EUROPE



energy for a changing world