

PANTERA project-A Pan European Technology Energy Research Approach towards synergies facilitation on smart grids

Setting the Scene: Why PANTERA? Main objectives and building the PANTERA process

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Why PANTERA?



- Europe wants coordinated steps forward to achieve the Energy Transition in meeting climate change needs.
- The smartening of the grid infrastructure has taken by storm over the last decade the traditionally slow moving electrical industry and work done up to now can be considered mammoth.
- Effort spent in this process is considered extensive considering the achieved results but one dimensional as far as involvement, expenditure and benefits achieved.
- PANTERA CSA steps in to raise awareness, participation, effectiveness, full use of EU resources and as a result :
 - strengthen the involvement of the European industry and
 - sharing of benefits achieved.

General information



Type of Action: Coordination and Support Actions (CSA)

Duration: 48 months

Starting date: 1 January 2019

Total Budget: 3.9 Million Euro

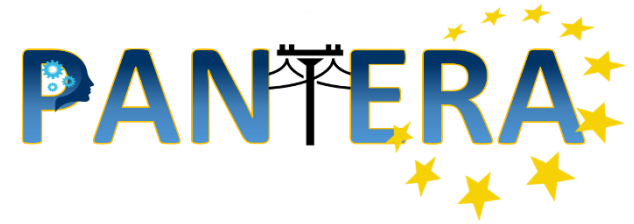
Coordinator:



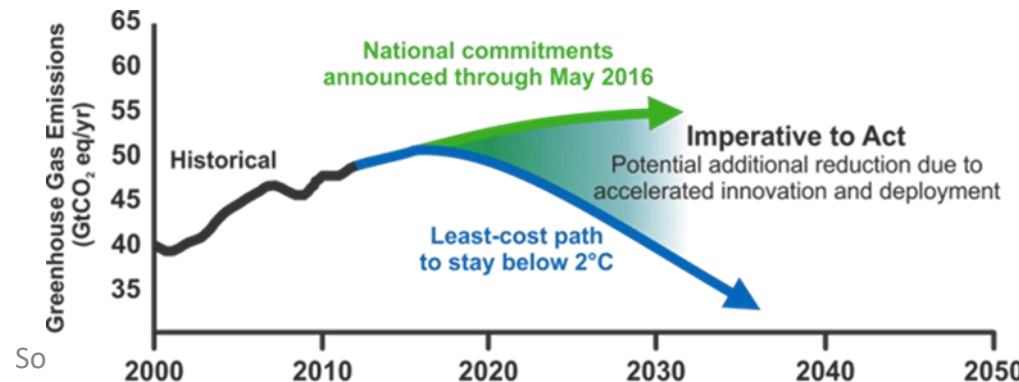
Consortium:



Vision for a Clean Planet by 2050



- The Paris Agreement objective is to keep temperature increase to well below 2°C and to pursue efforts to limit it to 1.5°C
- But the IPCC report confirms that limiting climate change to 1.5°C has to be pursued to avoid these worst impacts
- For the EU to lead the world in climate action, it means achieving net-zero greenhouse gas emissions by 2050
- The EU with this vision can inform others how we can deliver collectively a clean planet.
- The Long Term Strategy shows transforming our economy is possible and beneficial.





2010

2050

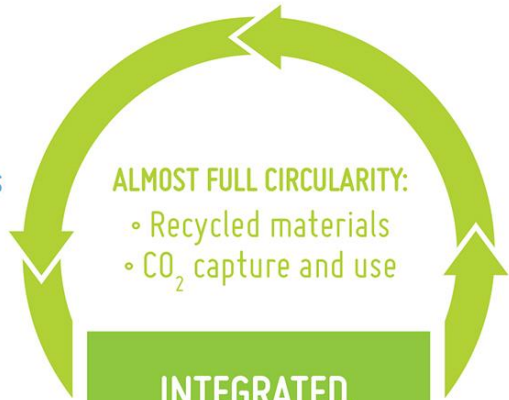
Little Renewable energy sources



- Fossil fuels
- Raw materials

- High CO₂ emissions
- High waste generation

Renewable energy sources



- Little waste generation
- Little CO₂ emissions



VISION 2050

A SYSTEM OF SYSTEMS



- NETWORKS
- Electricity
- Heating & Cooling
- Gas
- Data



CCGT



Objectives of European Energy Policy



Solidarity and energy security



An integrated market



Energy efficiency



Research and innovation



Decarbonisation



PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11

Sustainable energy for all Europeans



- To ensure sustainable, secure and affordable energy supplies in the European Union, a fully integrated grid and energy market is required.
- Through integrated emerging technologies and common energy market rules facilitated through cross-border infrastructure, that can optimize the use of sustainable resources in the EU, meaning that energy can be produced in one EU country and delivered to consumers in another.
- Cooperation and collaboration are key.
- This is why the EU-funded PANTERA project will identify and implement initiatives aimed at raising the participation of EU countries in the needed R&I for developing technologies, systems and markets in support of the common energy market and the energy transition.
- The project's main goal is to bridge the gaps in research and innovation in the energy field that exist between EU Member States.
- Its mission is to become the single point of reference for smart grids in Europe.



Strong platforms in EU to build on their success stories ...



ETIP SNET

PLAN.
INNOVATE
ENGAGE.

ETIPs have been created by the European Commission in the framework of the new Integrated Roadmap SET Plan by bringing together a multitude of stakeholders and experts from the energy sector. The ETIP Smart Networks for Energy Transition (SNET) role is to guide R RD&I to support Europe's energy transition.



Smart
Energy
Systems
ERA-Net

expera

Joint Programming Platform (JPP) ERA-Net Smart Energy Systems (ERA-Net SES) with owners and managers from 30 national and regional public funding programmes, it initiates and finances transnational RDD projects in thematic areas like smart power grids, regional and local energy systems, heating and cooling networks, digital services, cross-sector solutions etc. Thereby, it is boosting the implementation of the European Strategic Energy Technology (SET)-Plan.



Strong associations in EU to build on their success stories ...

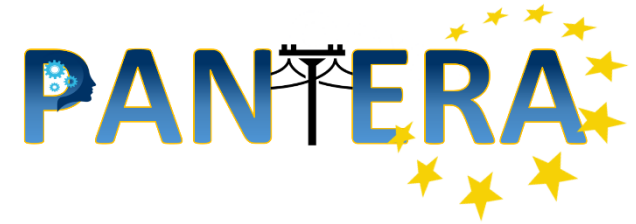


The European Energy Research Alliance (EERA) is an association of European public research centres and universities active in low-carbon energy research. Bringing together more than 250 organisations and around 50,000 researchers from 30 countries, EERA represents Europe's largest energy research community.



DERlab is an association of leading laboratories and research institutes in the field of distributed energy resources equipment and systems, developing joint requirements and quality criteria for the connection and operation of distributed energy resources (DER) and supporting consistent development of DER technologies.





THANK YOU FOR YOUR ATTENTION!

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