Energy efficiency in industrial processes (EEIP)

Yvonne van Delft,

Joint Program Coordinator (TNO)

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European Energy Research Alliance

Summary

Vision

To be the European leading R&D community in Energy Efficiency in Industrial Processes creating synergy advantages for European research organisations and industry in support of the energy transition and the SET-Plan goals.

>> Strong connection to SETPlan IWG6 Energy Efficiency in Industry.

>> Increase impact to the industry:

- White papers
- Increase communication
- Increase connection to A.SPIRE

>> Create a research agenda indicating research priorities for medium to long-term by:

- Sharing of knowledge and infrastructure
- Joint prioritisation of research activities
- Alignment of research efforts
- Coordination with industry & provide research and innovation assistance to industrial partners

Key values for participants

- **Be part of the strategic leadership for Industrial Energy Efficiency R&D**
  - Contribute to development of and having a voice in R&D and funding priorities, EU and national
  - Dialogue with industry
  - Access to marketplace for shaping EU proposals
- **Be part of the network of leading R&D groups**
  - Visibility and access to research area
  - Knowledge sharing and exchange; collaboration across projects
  - Dissemination and communication

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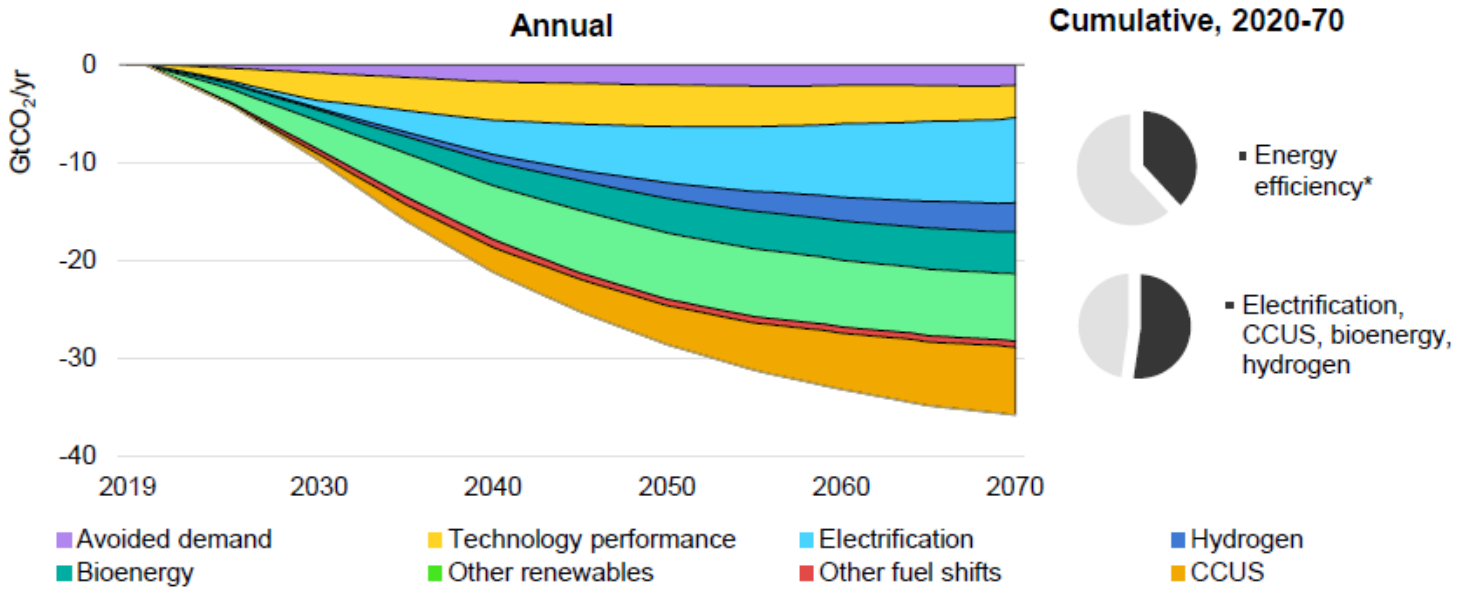
Why Energy Efficiency?

- Industry + services sector consume 39.3% of EU final energy
- Energy-efficient technologies and services contribute to about 40% of cumulative emissions reductions to 2070



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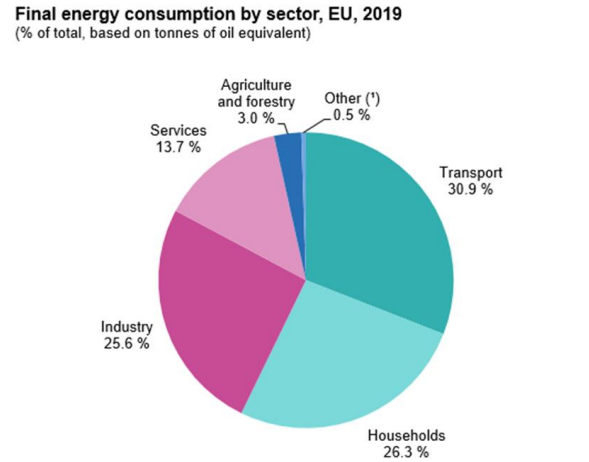
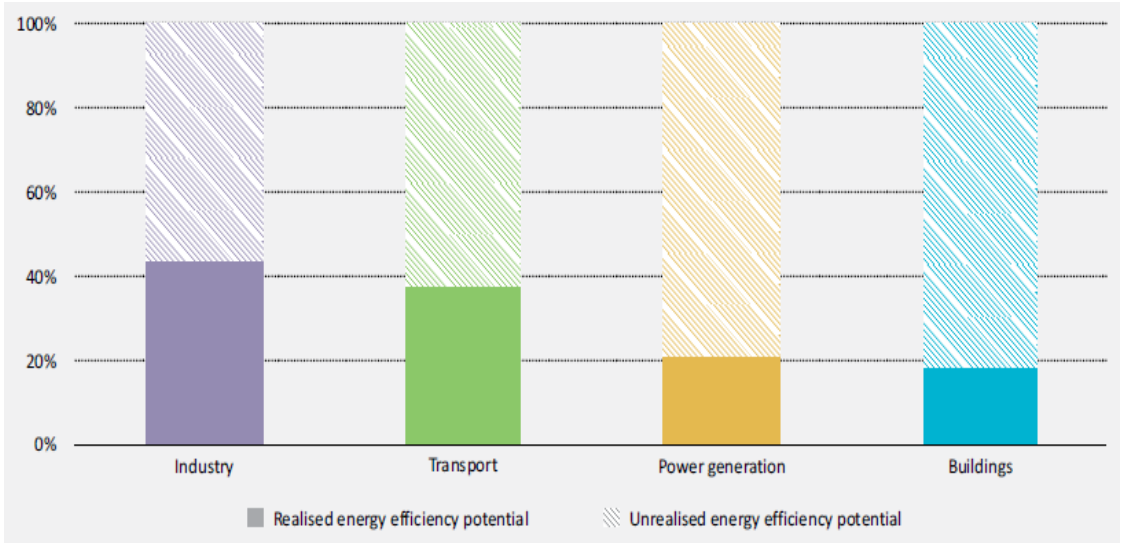


(1) International aviation and maritime bunkers are excluded from category Transport.
Source: Eurostat (online data code: nrg_bal_s)

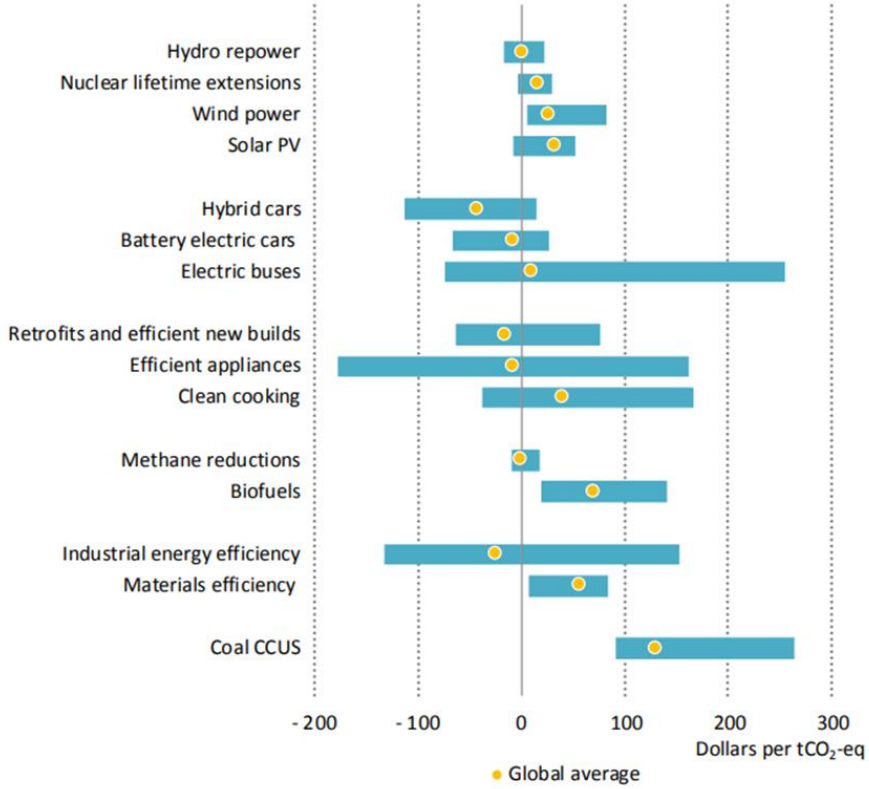
eurostat

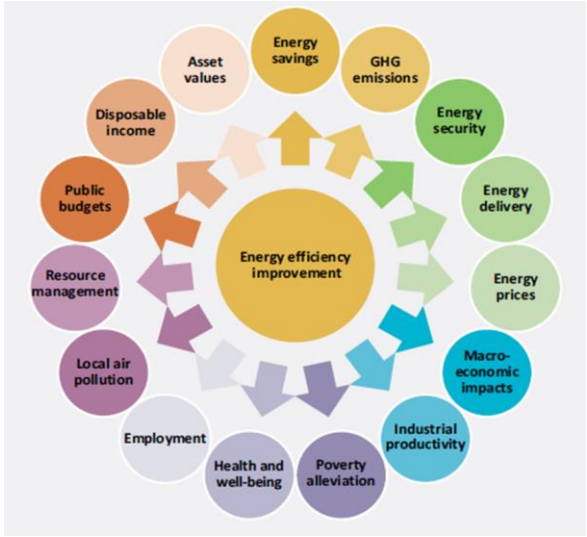
Why Energy Efficiency?

- Much has been done (large energy intensive industries), but untapped potential for EE remains huge
- Industrial energy efficiency results gives negative GHG abatement costs



Source: IEA





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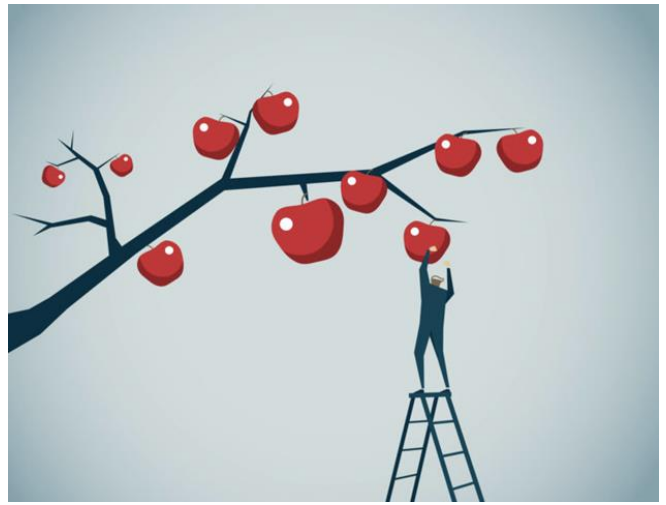
Energy efficiency measures – low hanging fruits?

- A lot has been done
  - Waste heat utilisation
  - Process integration
  - Optimized manufacturing processes
  - Local energy systems development
  - Environmental friendly reductants (biocarbon…)



Source

- But even if the "high" hanging fruits are hard to get – higher energy efficiency still has the potential to make an significantly reduced environmental impact
  - Large investments
  - Longer time to return of investment
  - Poor business case
  - Industry is "cash driven"

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How to collect the "high hanging fruits"…?

The EERA JP EEIP way

- Focus on Energy Intensive Industries:
  - Assess industrial processes to contribute to the implementation of more efficient technologies and solutions;
  - Propose advanced concepts and designs;
  - Verify the viability and affordability of the proposed solutions through concrete demonstration projects.

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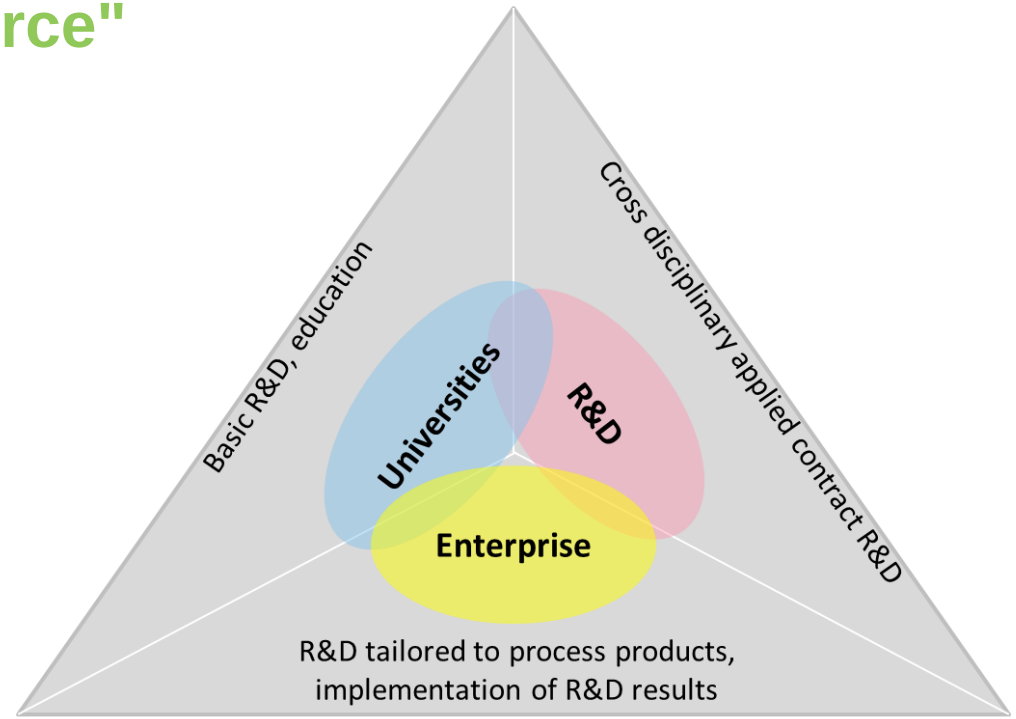
EERA JP EEIP in numbers – our "task force"

- 17 R&D institutes
- 10 countries
- Complement the work of industry lead initiatives in research activities on EE (such as ASPIRE, FoF…) by focusing in activities with lower TRL
- Opening access to infrastructures across Europe and joining forces of the best institutes



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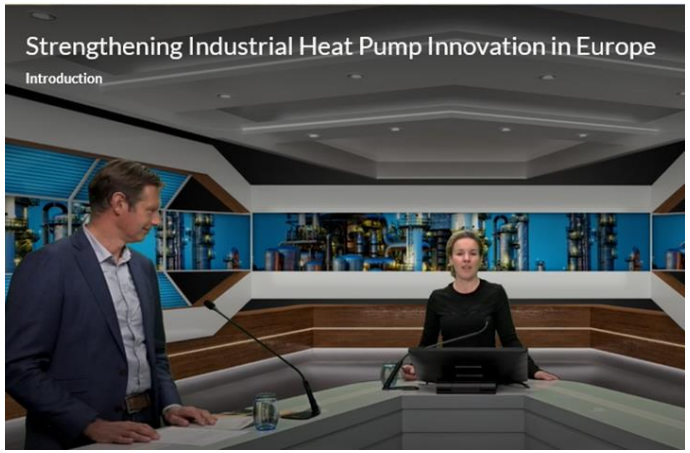
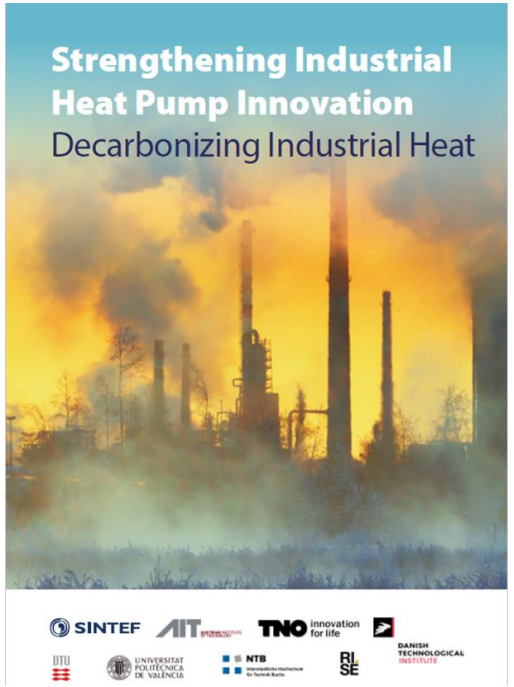
Present focus

- Focus on Energy Efficiency in Industry
- Involvement SETplan & CETP
- Collaboration & publication of whitepapers on relevant topics:
  - Heat pumps (2020), thermal energy storage (2022), role & impact of Energy Efficiency
- Knowledge sharing and exchange
- Access to marketplace for shaping EU proposals
- Increase collaboration with professional interest groups & industry
- Increase communication





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Value and impact

- Strategy and policy => SET plan
  - Partner of IWG6 – focusing on Energy Efficiency in Industry.
- Knowledge sharing from workshops, conferences and collaboration
- Platform for coordinating large European efforts
- Mobility and community building

Welcome to EERA JP Energy Efficiency in Industrial Processes

ABOUT JP EEIP

BECOME A JP EEIP MEMBER

Info: Energy Efficiency in Industrial Processes - Home (eera-eeip.eu)

Contact: yvonne.vandelft@tno.nl