PPP concept impact on SME development

Polish case study

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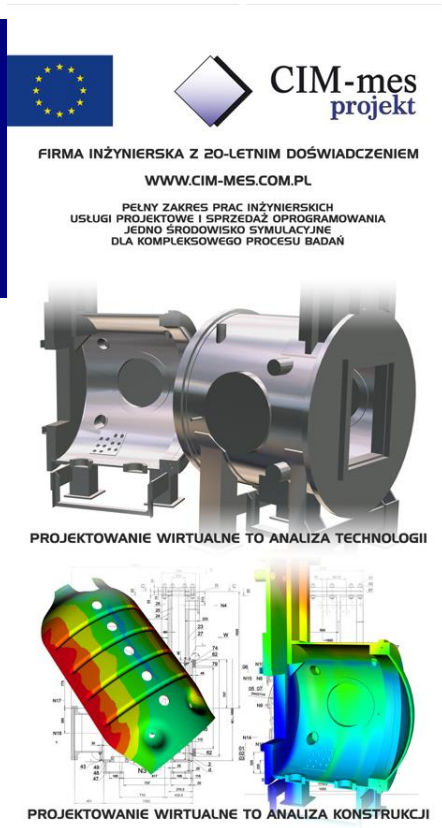
CIM-mes Projekt

Research & Development: mechanics, control systems
Supervision: pilot production, testing fields
Rosources: 10 person permanent Staff; upto 8 consultants
Revenue: upto 750 k€
On the market: since 1987

EC framework projects contribution:

FP5 :	1,
FP6:	4,
FP7:	6

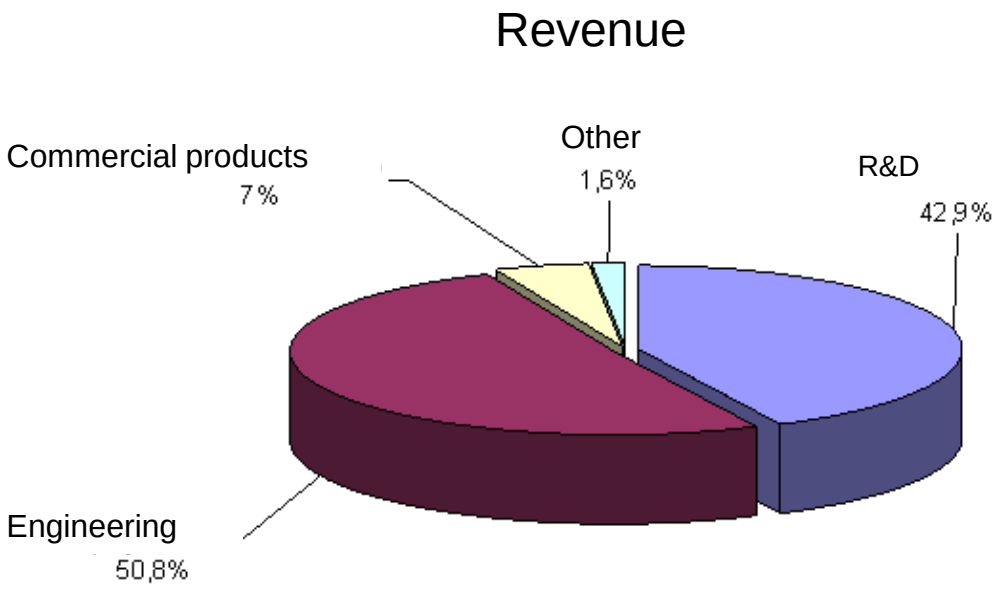
Coordination : two projects
Topics: materials, monitoring, controling



Mission:
Novel solution exploitation

CIM-mes projekt

CMS - SME



CIM-mes Projekt - Assets

Resources

- Engineering knowhow
- Innovation openess (for technology and for organizational framework)
- Trustworthy, creative staff
- International links
- Sustainable financial development

Communication

- Direct personal proffesional contacts
- Networking for research and industry
  - Making use of advantages from national and international agencies
- Target oriented cooperation with academy

Trustworthyness

- Solution by own resources
- Realization just in time
- Solution quality

CIM-mes ... Synergy loops

KNOWLEDGE – engineering versus R&D

CIM-mes and market niche:

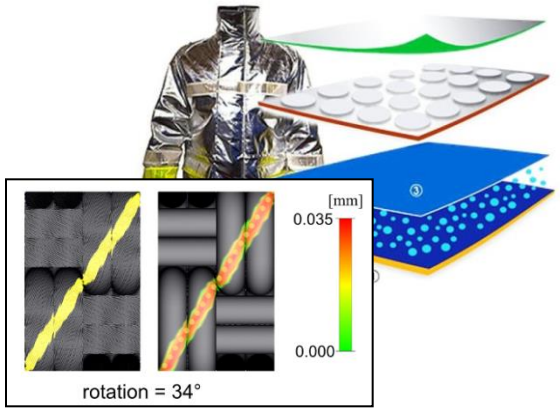
- endurance and safety of mechanical devices and systems

RESEARCH NICHE:

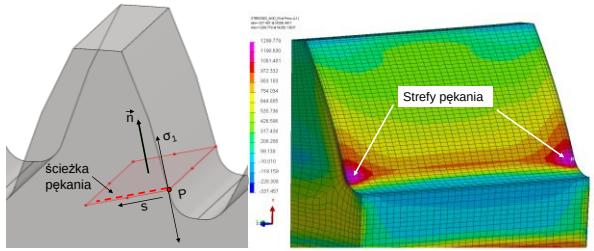
- NMP - superhydrophobity, optic properties
  - New solutions for industrial components in Energy, transport and safety
- Energy/ITC - efficiency by monitoring and control, hybrid systems (RES + fossil)
  - New solutions for Energy, buildings and environment

NMP – Research funding (IP, RIA, IA)

Textiles treatment: circuits



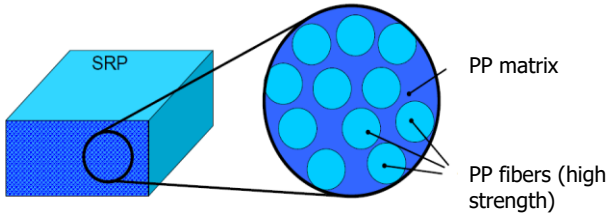
Metal treatment: laser



Laser safety

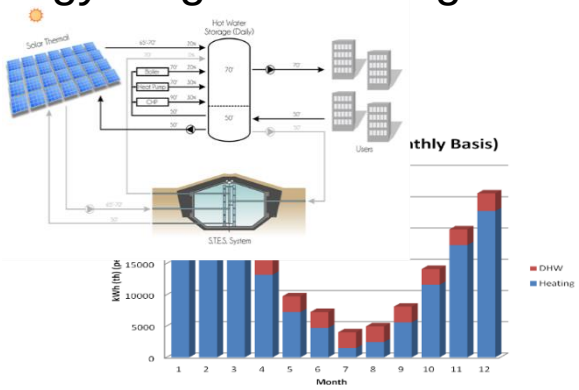
= functionality
= technology
= bulk material
= surface

Material set up: SRP - PP



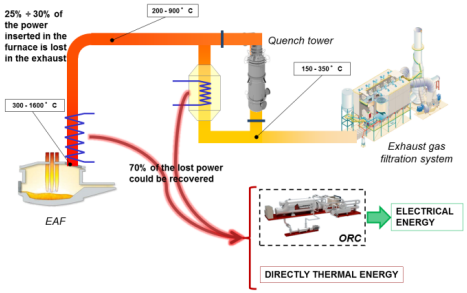
ENERGY – Research funding (PPP)

Energy long term storage

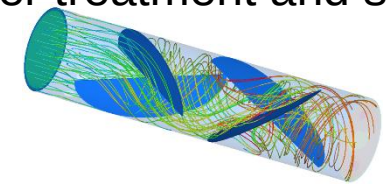


Heat transfer moderation

Industrial waste heat EMS

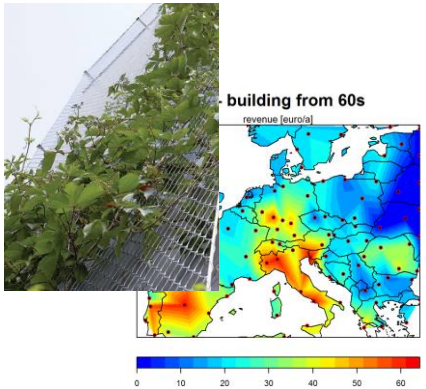


Water treatment and storage



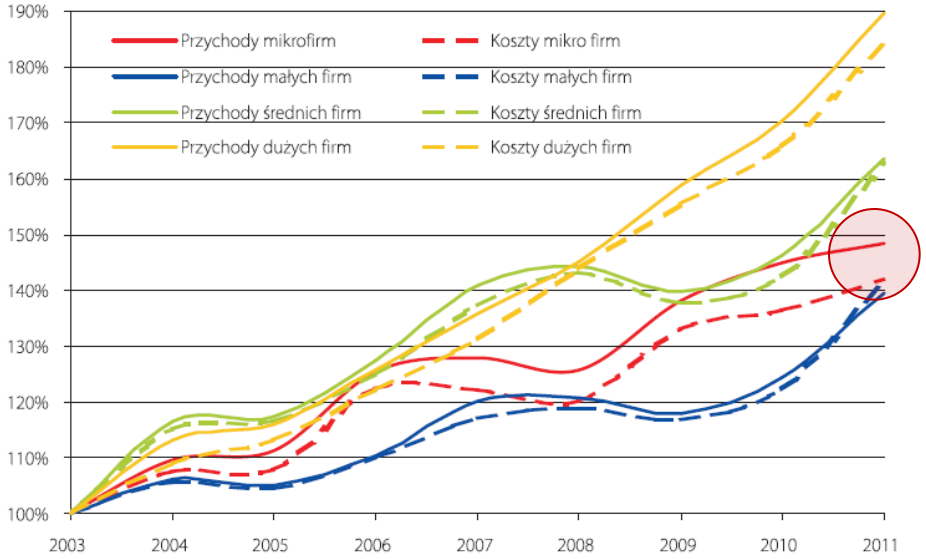
= modeling + validation
= monitoring
= control and EMS

Environment and Cimate impact



Comment on SME advantages

- Flexibility and flat structure
- Easy horizontal networking



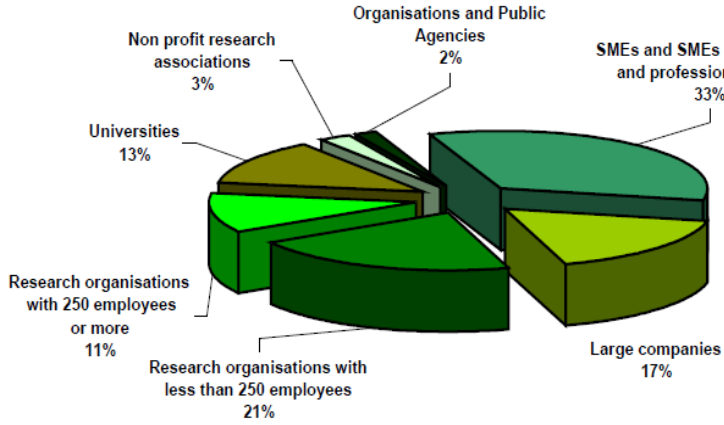
PPP: tool for European Economic Recovery Plan (2008)

CIM-mes projekt

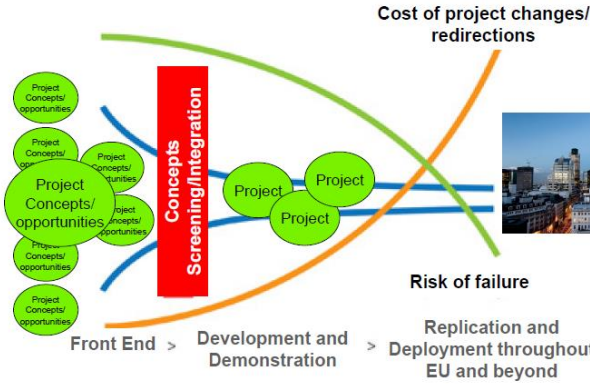
- Leading role of Industry in defining of research priorities
  - Represented by industrial interlocutor (EeB, FoF,GC): implementation, Multi-annual Roadmap for long term investment
  - Predefined budget
  - Ad hoc Industry Advisory Group to EC – DG RTD (NMP and ENV), DG TREN and DG INFSO
  - Emphasis on relevance of industry and impact
  - Increased use of SME friendly instruments and demonstration
- Mobilisation of remarkable EC funding envelope to be contributed in equal shares by the private sector and EC under FP7/H2020
- Use of existing instruments: shift of NMP , ENV, ENERGY and ICT funding resources

PPP: - embodied innovation chain

- E2BA value chain environment



- Smart research policy and objectives identification



FP - environment

- RTD, Large industry oriented
- Narrow margin for SME development despite of promotive image

- Since FP7 new concept appeared to reach commercial effect of research
  - Contractual PPP : E2B, FoF, GV, 5G (+ new in HORIZON): release of synergy with horizontal approach:
    - Common target – cloaser to market
    - Horizontal assets – NMP, ENV, ITC, Energy ……
    - Industry – 50%, SME 23%

Beyond European Technology Platform : PPP

CMS place

- Partnership based on contractual agreement between CE and industry partners : RIA and IA instruments
- Strong commitment from industry to joint objectives of European industrial lidership:
  - Private sector organises stackholder consultations in an open and transparent way covering whole value chain
- Precise performance idicators from industry –TRLs

FP7 outcome

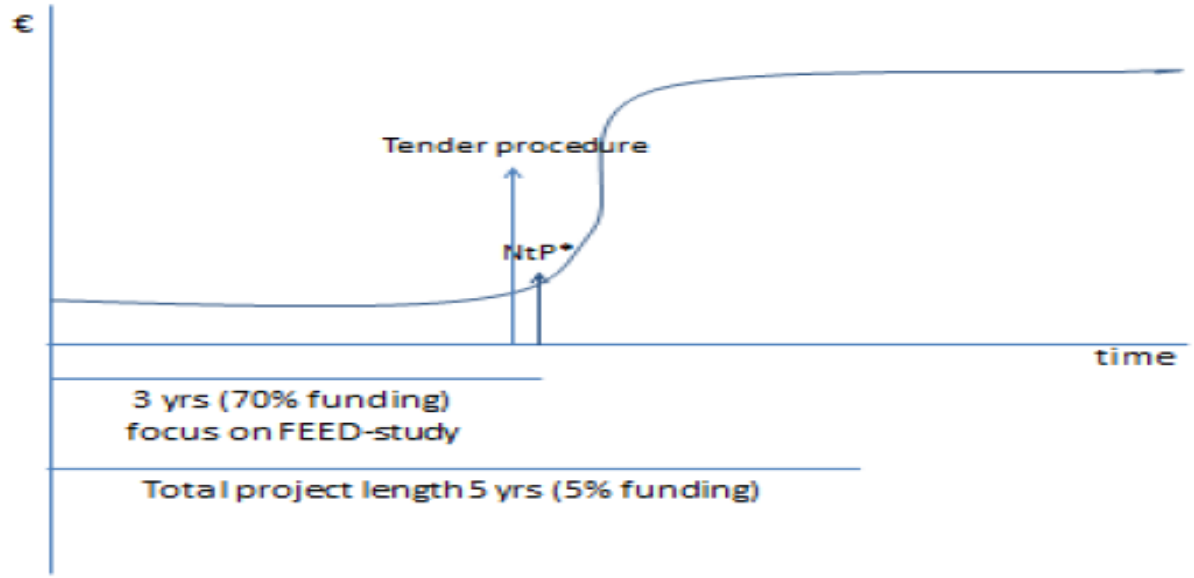
- Quick response in defining the strategy
- increased industry participation : >50%, SME 23%

CIM-mes exploits contractual agreement partnership withing FoF and E2B

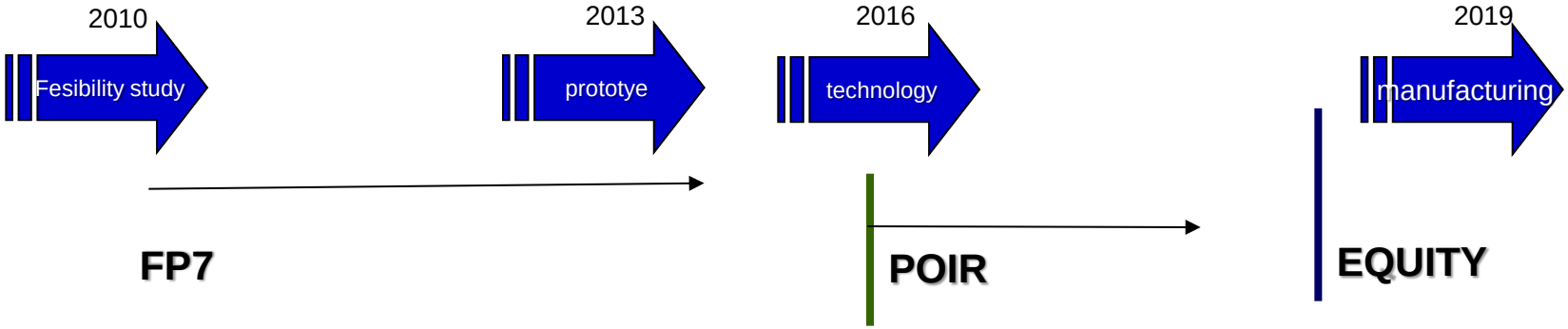
Contractual PPP – company development leverage

CASE STUDY _ ON GOING

Innovation concept



NtP – Notice-to-Proceede, possibility to terminate the project*
FEED – Front End Engineering Design



NMP: PROSYS – 2009-2012

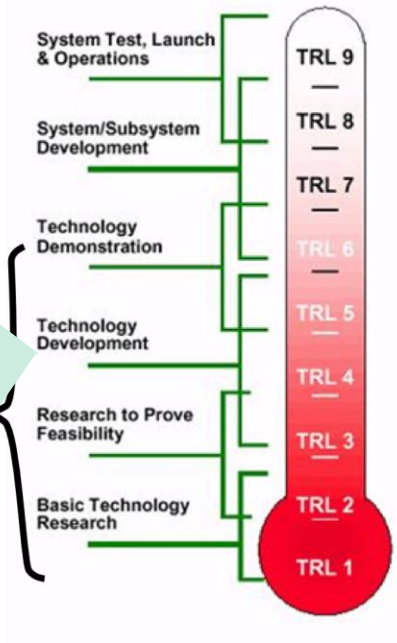
Protection system against HLD possible irradiation

CIM-mes projekt

models

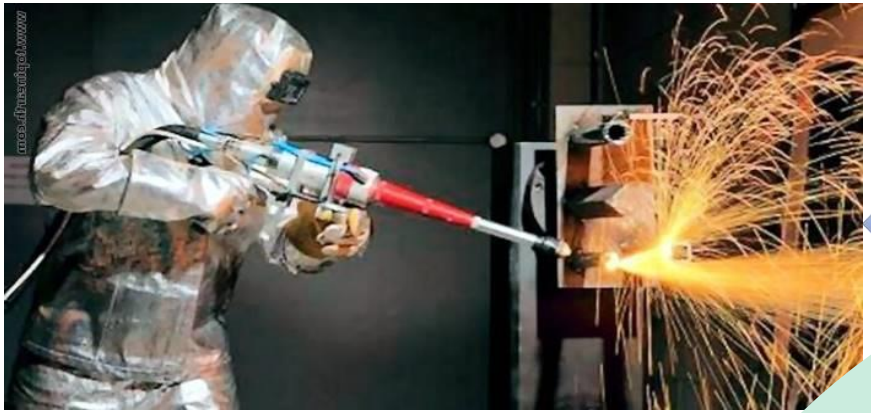
Standards

Basics



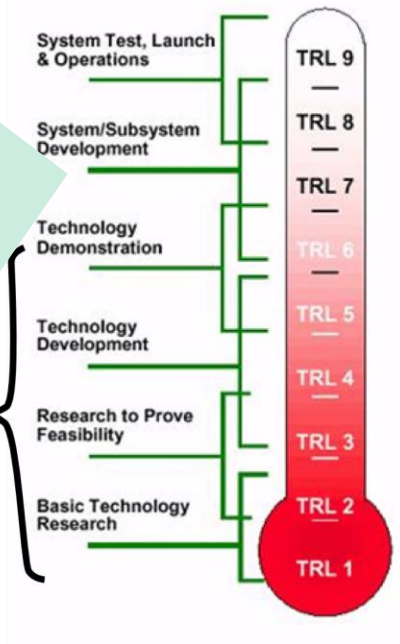
LICUR - Active Protective Curtain Against High Power Laser Radiation 2017-2019

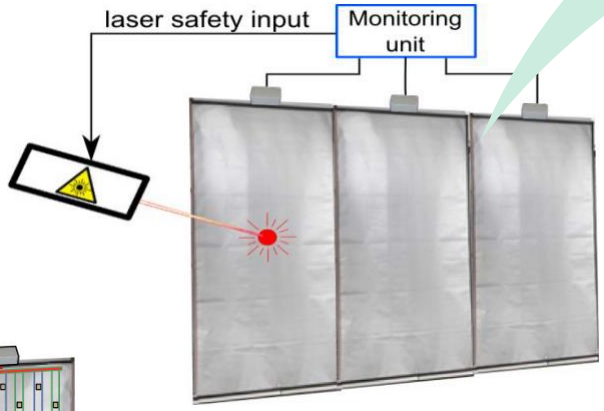
CIM-mes projekt

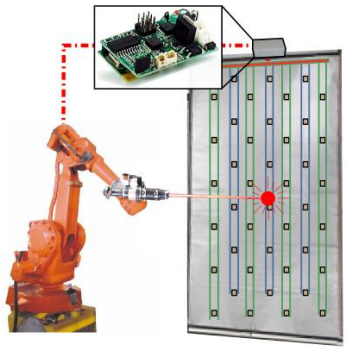


CIM-

Prototype
pilot
production







Well defined product, market identified

Contractual PPP – company development leverage

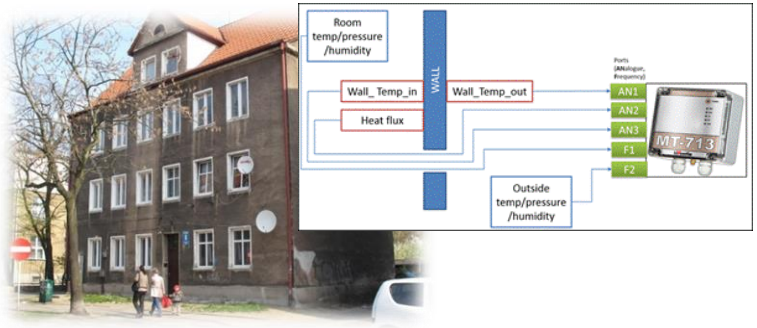
Energy Efficiency

CASE STUDY _2_ GOING ON

EeB – Heat: envelope improvement

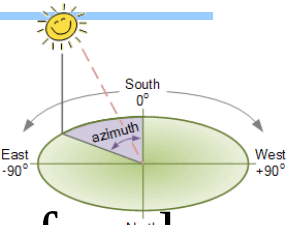
EASEE

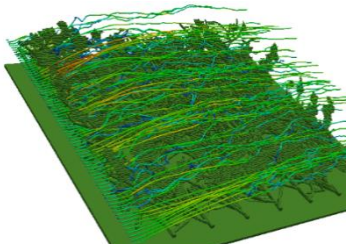
- U improvement

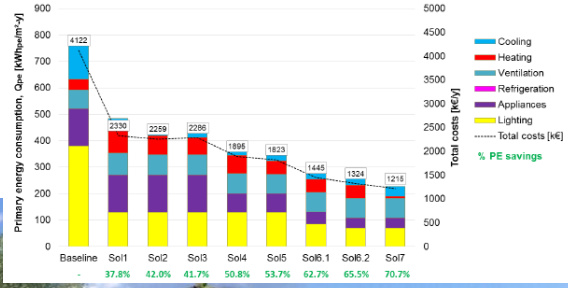


COMMONENERGY

- HVAC+Light+Green facade



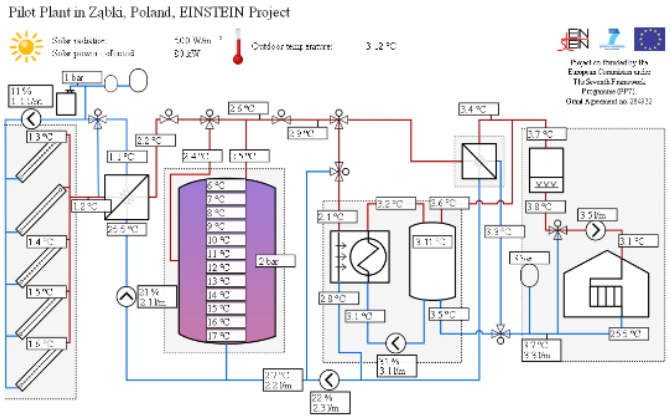




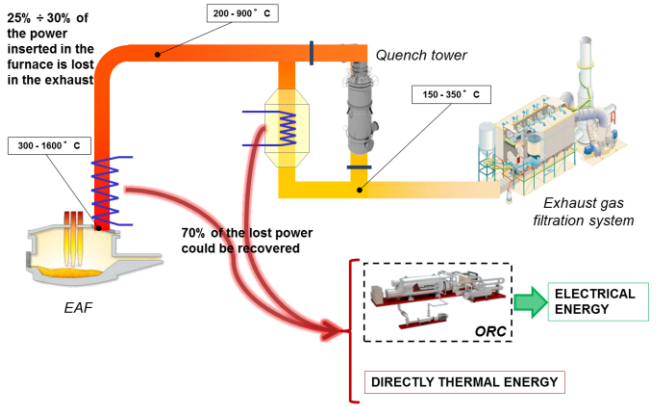
- Holistic approach
- Demo budget
- Elements of CSA
- Business modeling

EeB Heating-RES-Waste

- Einstein



- Pitagoras



- Consortium complexity
- Demo budget
- Complementarity of investments budget

Last comments …..

Innovation phase support on commercial bases

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