

KME

Consortium Materials technology for
thermal energy processes

Conference 2019



KME
CONSORTIUM MATERIALS TECHNOLOGY
for thermal energy processes

Energiforsk

- Energy industry's tool for research and innovation
- Drivers of research, development and innovation within the energy field
- Impartial
- Non-profit sharing
- Owners





Research within Energiforsk

Demand driven

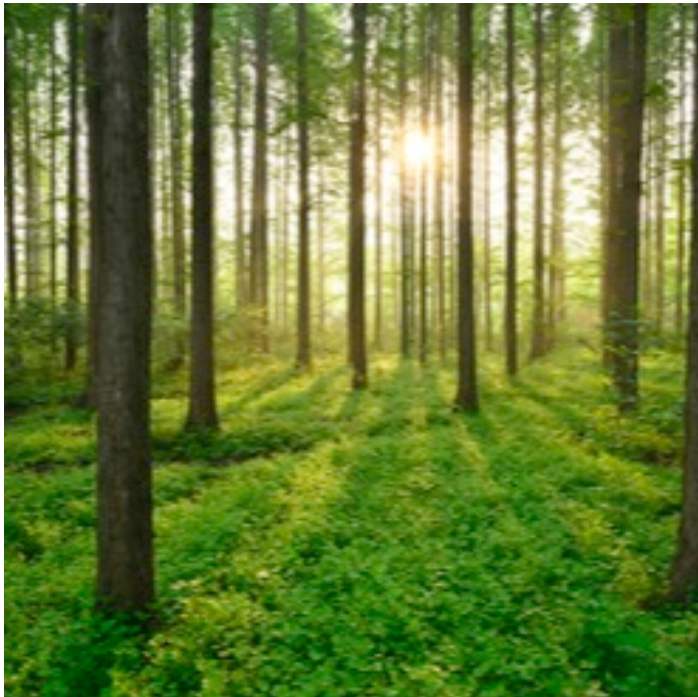
- what knowledge gaps?
- what can we do together?

Economic benefits

- cost sharing
- level up with other funds

Knowledge and networking platform

- exchange of experiences
- access to early knowledge
- competence building



KME

- Multi-cliental group of companies – platform for co-operation
 - Solve industry relevant material related problems, together with academia or institutes
 - Different stakeholder groups along the value chain
 - Develop industry relevant research projects
 - Information and knowledge exchange
- Research projects are applied and demand driven
 - Performed as close cooperation between industry and academia or institutes
 - Combining perspectives over the entire value chain
 - Based on the industry's need, field studies
 - Deep knowledge from researchers utilised
- Ongoing over 20 years (100 reports, + 30 PhD's, implemented results)
- Energiforsk keeps it together

Stakeholders

Kanthal
MH Engineering
Höganäs
Calderys
Sumitomo
Valmet
B&W Vølund

Energy companies via Energiforsk:

Stockholm Exergi
Ørsted
E.ON Energilösningar
Vattenfall
Falu Energi
Mälarenergi
Krafttringen

Tekniska verken i Linköping
Jämtkraft
Karlstads Energi

Researchers at:

Chalmers University of Technology
Linköping University
Högskolan väst
Rise KIMAB (Swerea)
Rise IVF (Swerea)

Ongoing research – first batch of projects

KME no	Project title	Participating companies	Project leader
KME 801	Heavy section austenitic stainless steel for the future header and piping material in high-efficient biomass-fired power plants	Sandvik Materials Technology, Sumitomo, Energiforsk	Mattias Calmunger, Linköping University
KME 802	Increased fuel flexibility and performance for boilers with challenging fuels	Valmet, Mälarenergi, EON, Stockholm Exergi, Falu EoV, Vattenfal, Kanthal, MH Engineering, Calderys, Energiforsk	Rikard Norling, Ri KIMAB
KME 803	New materials and Oxygen Carrier Aided Combustion for improved competitiveness of FB plants using renewable fuels	Sumitomo, EON, Stockholm Exergi, Kanthal, Sandvik Materials Technology, MH Engineering, Energiforsk	Jesper Liske, Chalmers
KME 804	Increased flexibility and power-production from biomass through material development and corrosion prediction	Valmet, Ørsted, Kanthal, Sandvik Materials Technology, Energiforsk	Torbjörn Jonsson, Chalmers
KME 805	HiPerCOAT: High performance coatings to combat erosion-driven damage in power plants	Höganäs, MH Engineering, Mälarenergi, Energiforsk	Uta Klement, Chalmers

Status and what happens now?

- Five ongoing projects
- Process to form consortium ongoing
- Process to elaborate project agreements ongoing
- Signals Energy Agency plan to merge the two programmes
 - Biopower
 - Turbines for future
- New upcoming call end 2019
 - Time to start planning new projects!
 - What is missing? Think wide
 - Energiforsk facilitate and assist

Thank you for your attention



More information:

www.energiforsk.se

bertil.wahlund@energiforsk.se

KME

CONSORTIUM MATERIALS TECHNOLOGY

for thermal energy processes



Material related programmes

