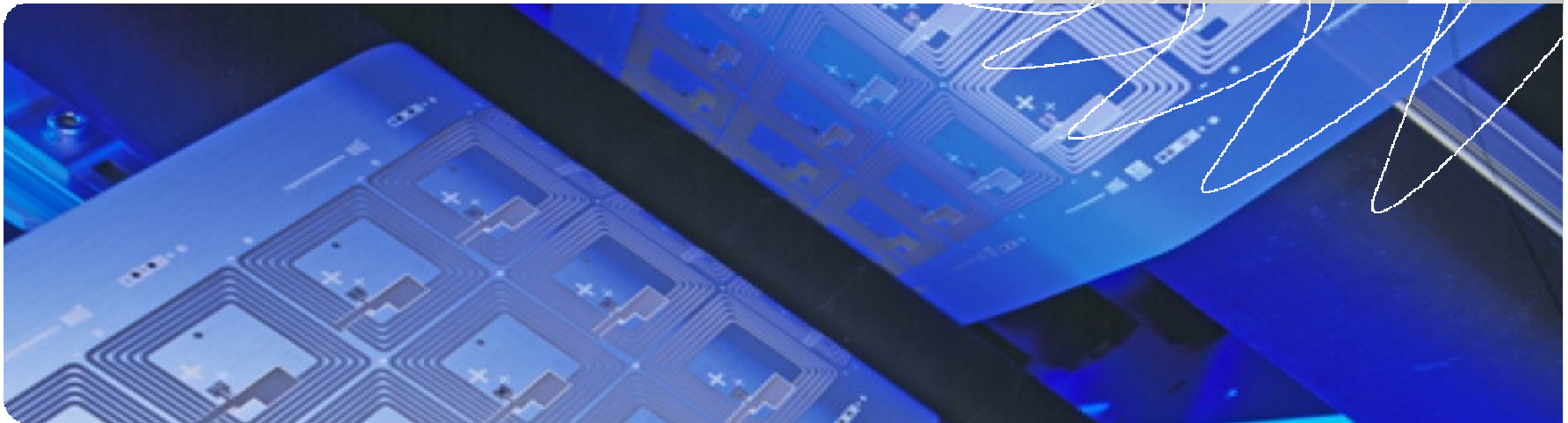


European Economic Recovery Plan

Industrial Needs and Visions for Factories of the Future



Implementing the “Factories of the Future” PPP

Massimo Mattucci

EFFRA Chairman



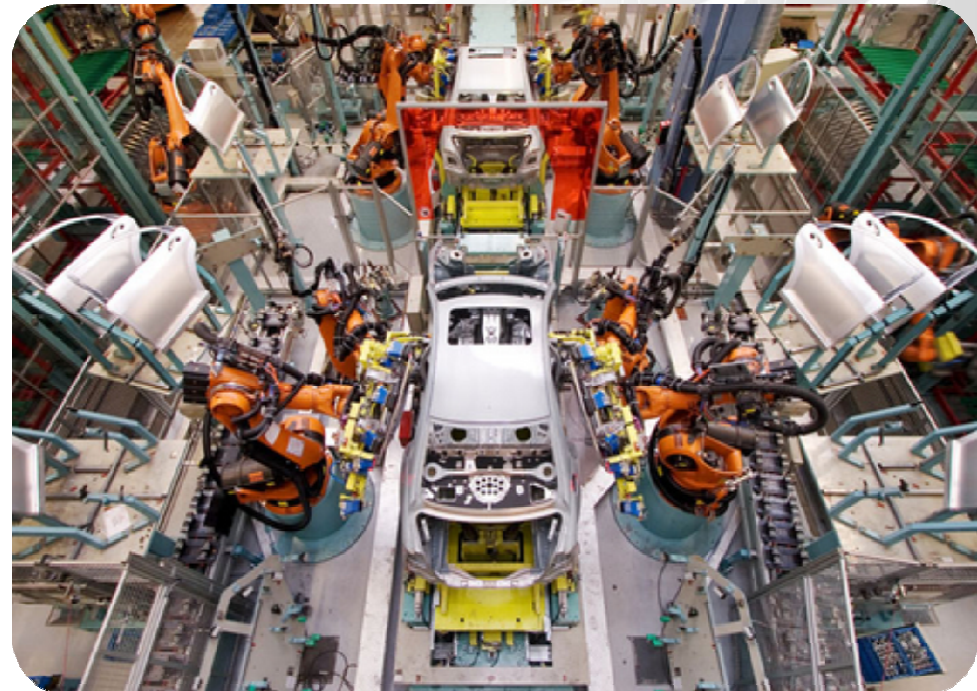
EFFRA

EUROPEAN FACTORIES OF THE FUTURE
RESEARCH ASSOCIATION

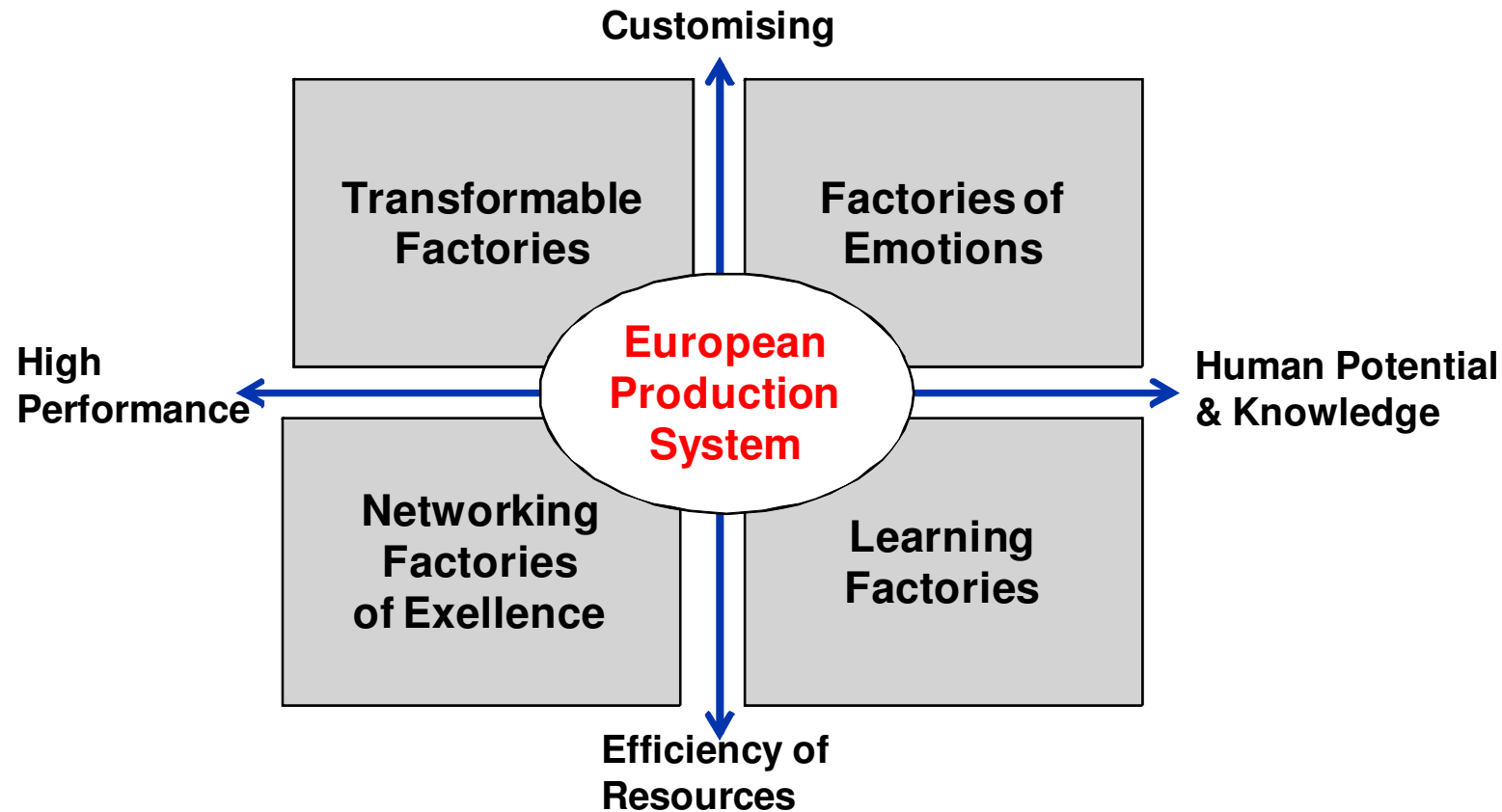
a MANUFUTURE initiative

Industries' needs for the next future

- more sustainable way of production
- make full use of next generation ICT in the shop floor
- boost labour productivity
- use less resources and new materials



Factories of the Future impact



Factories of the Future PPP outlook



Key facts

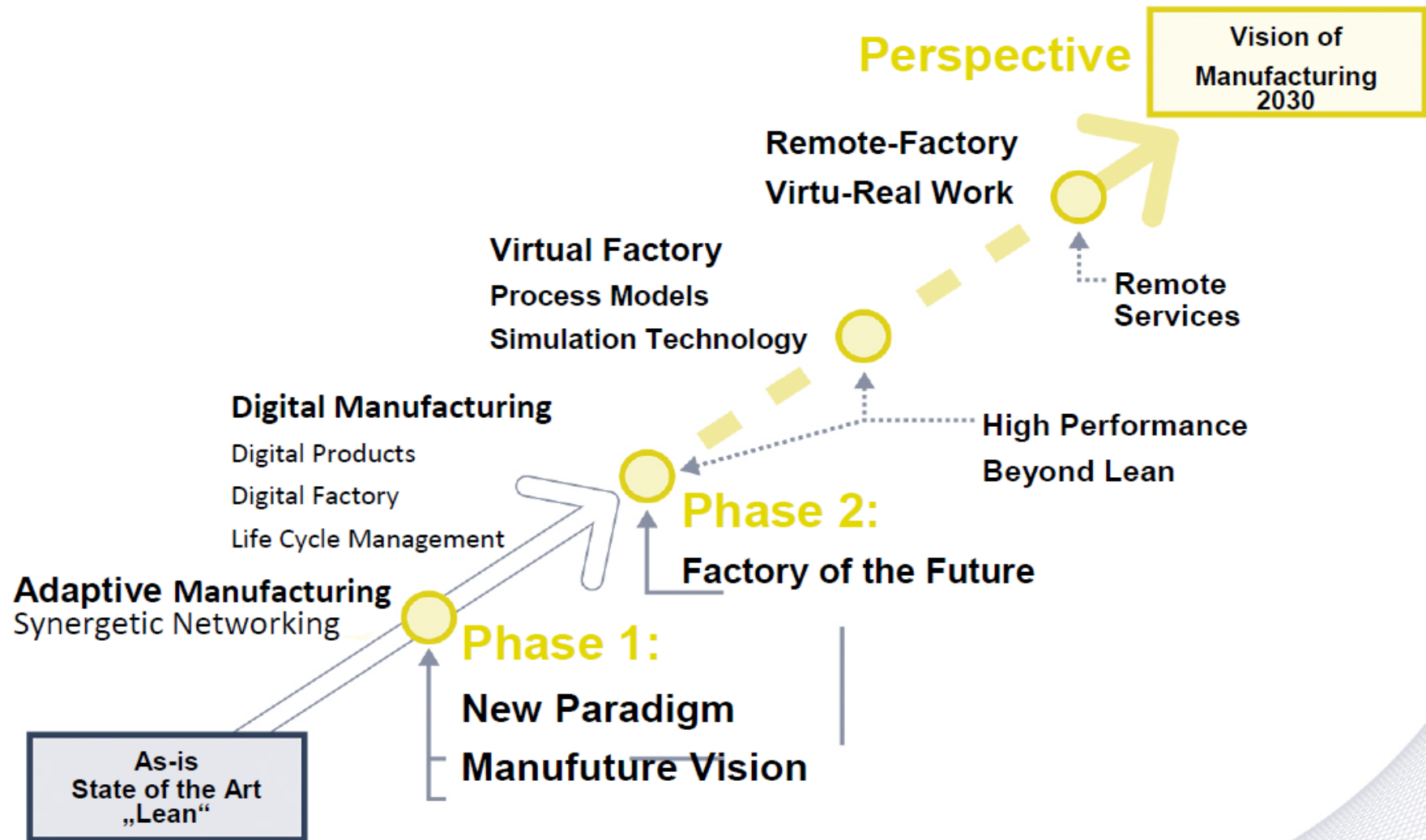
- aiming for critical mass by pooling public and private resources
- launching hundreds of R&D projects over period of many years
- increasing efficiency in EU research
- leading to commercially viable products and processes



Main requirements

- added value for governments and for businesses
- joint agreement on priorities and targets
- clear definition of roles, tasks and rights
- risk tolerant and trust-based approach

Manufacturing Perspectives



EFFRA research priority 1

Sustainable manufacturing

- adapt factories to demographic change
- make factories places where people like to work
- decrease energy consumption
- reduce environmentally harmful emissions

EFFRA research priority 2

ICT- enabled intelligent manufacturing

- “smart factories” with next generation of robotics and automation
- “digital factories” for simulation, modelling, and product life-cycle management
- “virtual factories” for optimised networked production

EFFRA research priority 3

High-productivity manufacturing

- more adaptive production equipment to increase flexibility
- high-precision manufacturing to cope with miniaturisation of products
- improving quality control and achieving “zero defect” manufacturing



EFFRA research priority 4

Materials in manufacturing

- reduce materials consumption by better measurement and adaptation of production process
- develop new processes for modern high-performing materials



Short-medium term co-operation



FoF PPP - a good start

- Contribution of public partner
 - set-up of Ad-hoc Industrial Advisory Group
 - preparation of Strategic Multi-annual Roadmap
 - internal prioritisation of FoF proposals
- Contribution of private partner
 - set-up of industry-driven association
 - some hundred members from across Europe
 - consensus on joint research priorities

FoF PPP - a good start

- FoF 2010 call: a great achievement
 - open « Information Day » on FoF 2010 call
 - high success rate for proposers
 - streamlined administrative procedures
 - strong involvement of industry, including SMEs
 - all the more remarkable as both partners had little time for preparation

JTI Sherpa Group report as basis

- Report of the JTI Sherpas Group
 - joint effort by current JTIs and new PPPsd
 - designed the « ideal house » for future JTIs
- Sherpas' advise on legal structure
 - risk-tolerant and trust-based approach
 - tailor made for Public-Private Partnershipc
 - creation of framework financial regulation for a « special body » status in EU

FoF PPP medium term outlook

- Sherpa's advise on operational modalities
 - efficiency and sound financial management
 - clear definition of roles, tasks and rights
 - transparent recruitment of staffs
 - sound evaluation system
 - effective engagement of SME community

FoF PPP medium term outlook

- Future steps
 - report discussed at Commission top level
 - implementation is a matter of years: FP8
- Stronger co-operation within FP7
 - key recommendation of JTI Sherpa Group
 - for higher visibility of initiative and ensuring long term commitment

Short term co-operation

- Advice on industrial research priorities
 - continuous support through Ad-hoc Industrial Advisory Group
 - updating strategic technology roadmap
 - suggesting topics for forthcoming calls
 - creating consensus on research priorities
 - appointing observers for Programme Committee meetings

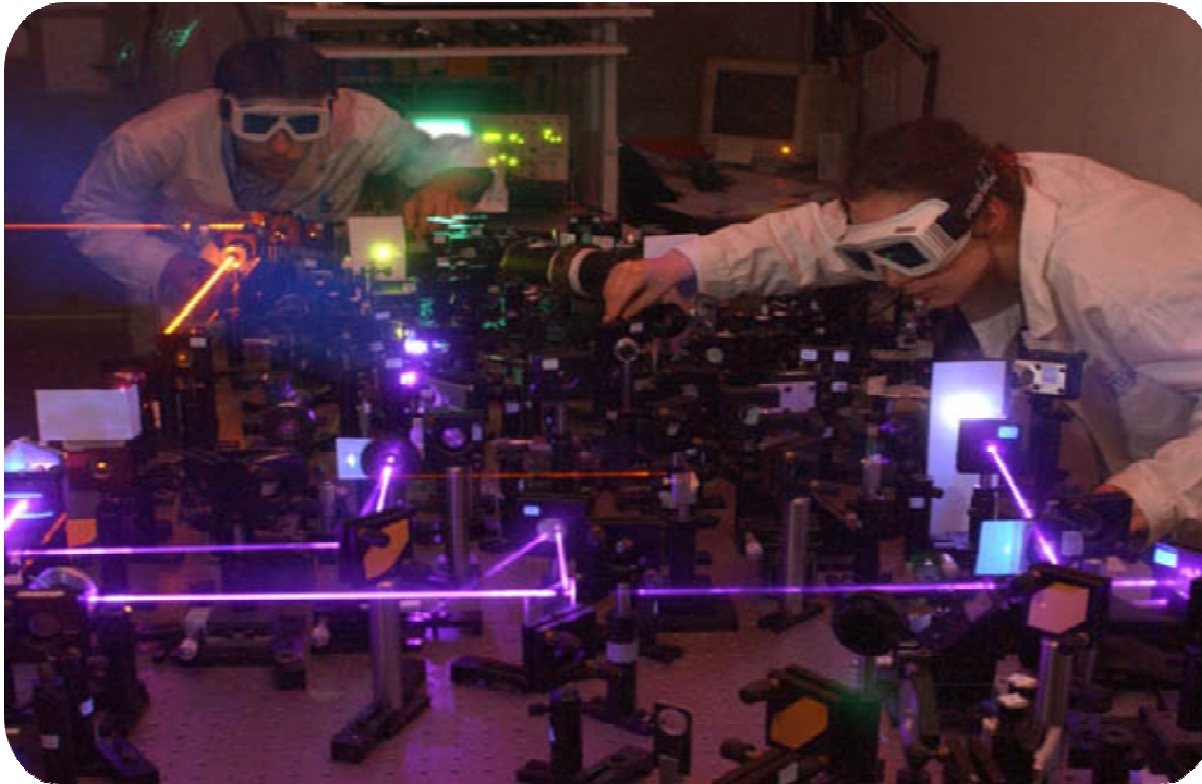
Short term co-operation

- Mobilisation of private investments
- Safeguarding industrial relevance
 - channeling more industry investment in EU research projects
 - helping to set up industry-driven consortia
 - assisting EC at « Information Days »
 - drafting lists of experts for evaluation process
 - appointing observers for evaluation sessions

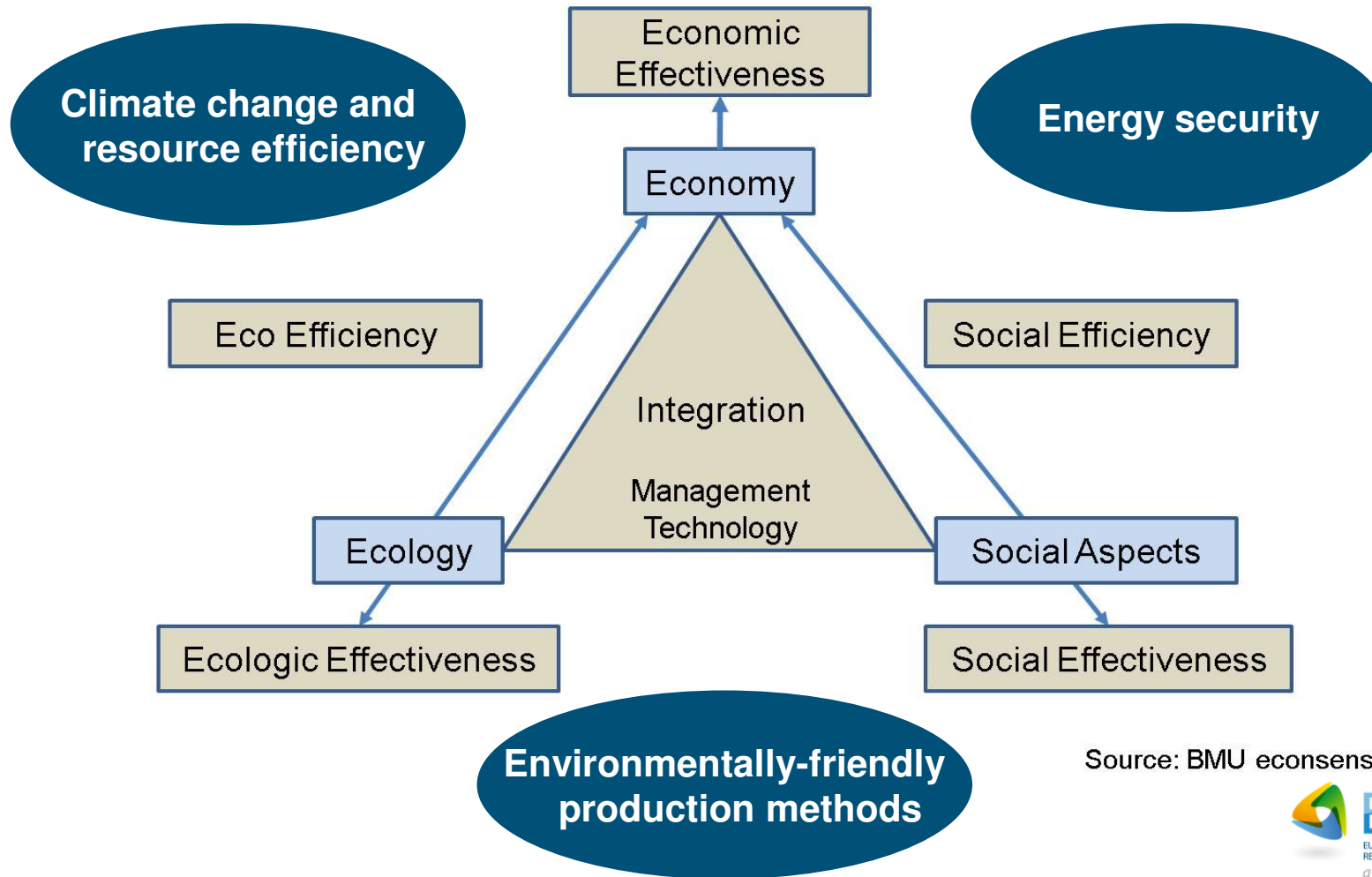
Short term co-operation

- Consistency with industry expectations
- Make innovation happen
 - provide list of experts for reviewing projects
 - bridge gap between research and innovation
 - key concern for smaller companies
 - exploring better methods for knowledge transfer

Conclusion and outlook



Europe 2020 « grand challenges »



Source: BMU econsense



Conclusion

- “Factories of the Future” can strengthen and transform Europe’s manufacturing base
- the public-private partnership approach can benefit both business and governments
- a stronger cooperation and an agreement of common goals and objectives can take the initiative to the next level