



EUROPEAN UNION



SEVENTH FRAMEWORK
PROGRAMME

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EU-project RECOMBIO:

- Part 1:** Project introduction
- Part 2:** Production of BIOBS in Erftstadt
- Part 3:** Use of BIOBS
- Part 4:** Messages – Closing remarks
- Part 5:** Back-up

Dr.-Ing. Th. Glorius,
Final Conference RECOMBIO,
Helsinki 13.06.2013

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Part 4:

Messages – Closing remarks

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- **Certified SRF`s** (i.e. RAL-GZ 724) guarantee a high quality reliability and ensure an **environmentally friendly use in cement industries and power plants**
- **Fuel-quality** is the decisive tool for **high efficiency**
- About **1t CO₂ reduction/t SBS or BIOBS** in brown-coal substitution
- Results of external **LCA by the JRC Ispra** on behalf of the EU-Commission taking into account 15 life cycle impact categories **shows environmental sustainability**
 - **Demonstration case Finland: improvements for 10 of 15 categories**
 - **Demonstration case Germany: improvements for 14 of 15 categories**
- Co-incineration of **quality assured SRF is ecologically useful compared to using primary resources**
- **No “food or fuel“-problematic of SRF**
- **Production and use of SRF is recommended** for other (EU-) countries (i.e. GB, PL)
- **European potential SRF co-incineration** cement and power plants: **15 - 30 Mio t /a**
- **MSW-Incinerators** as the last step of modern waste management (**ultima ratio**)

Still to be done

(06/2013)

- **Prevention of overcapacities of MSWI (experiences DE, NL, ...)**
- **International cooperation to**
 - develop resource-infrastructure in NMS (waste-collection, sorting, recycling, SRF-production)
 - use existing MSWI/Waste-to-Energy capacities
- **EU-funding for sorting, recycling and SRF-production and not for MSWI-projects (i.e. EFRE)**
- **Prevention of taxes for SRF (counterproductive for efficient use of waste)**
- **New European SRF-demonstration projects (FP 8) to support international exchange, NMS and developing MS (i.e. Poland, Spain, ...)**

Recommendations

to develop a sustainable SRF-market

- **Governmental activities:**
 - Implementation of a gradually increasing **landfilling tax**
 - **Support** of energy-efficient technologies (**CHP**, ...)
- **Producers:**
 - Activities to achieve/**increase acceptance** i.e. by implementing reliable QMS (CEN/TC 343) – and **certification** of SRF (i.e. RAL-GZ 724)
- **Producers and users:**
 - Intensive **cooperation**
 - **Information** of population and (local) politicians



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How to reach the goals the RED without SRF?

How to reach the recycling targets without SRF?

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Beautiful Finland

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Thank you for your attention !



Thank you to the COM/DG ENER for funding the RECOMBIO-project

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Back-up

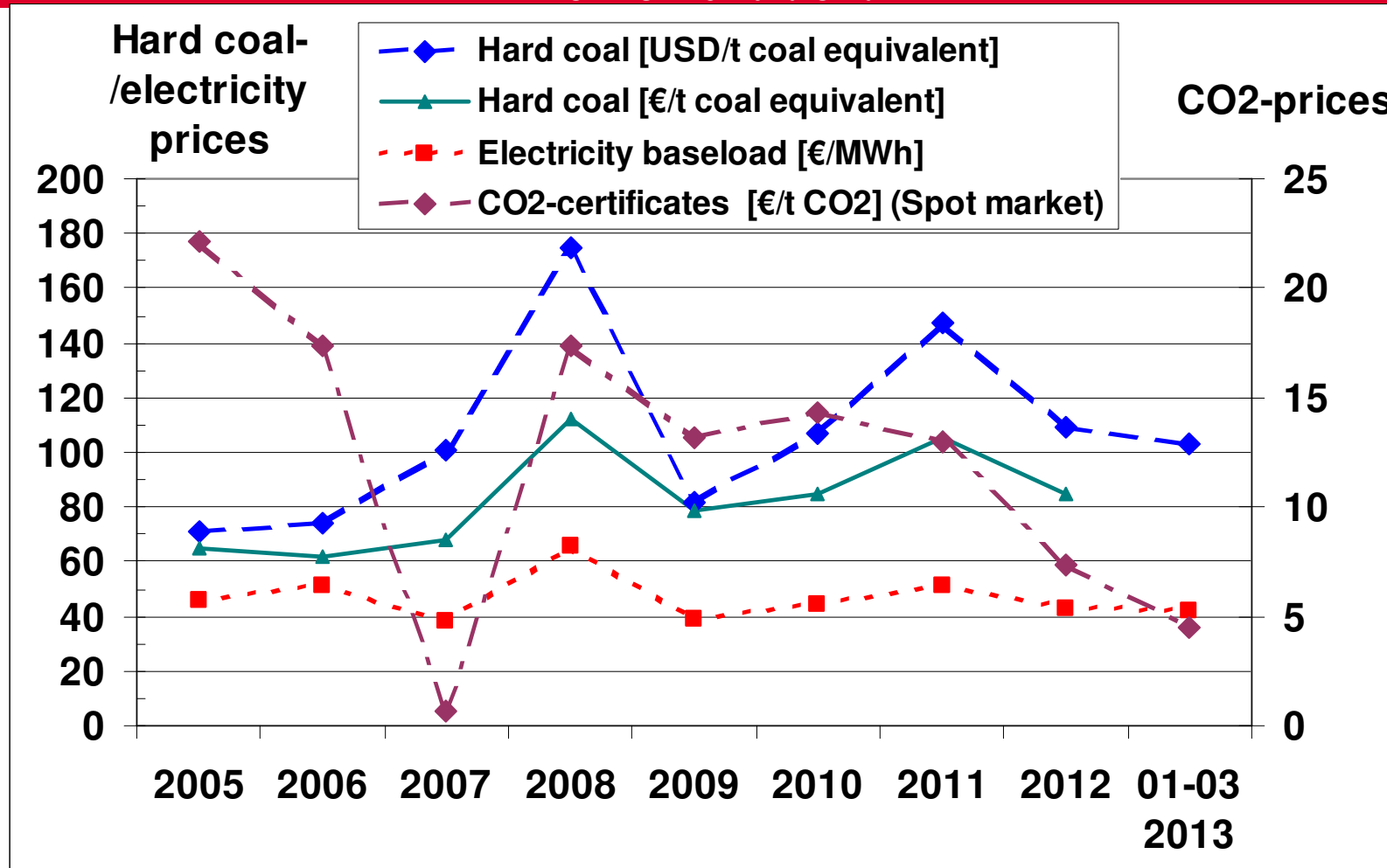
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Development of important factors

influencing the SRF-market in Germany (06/2013)

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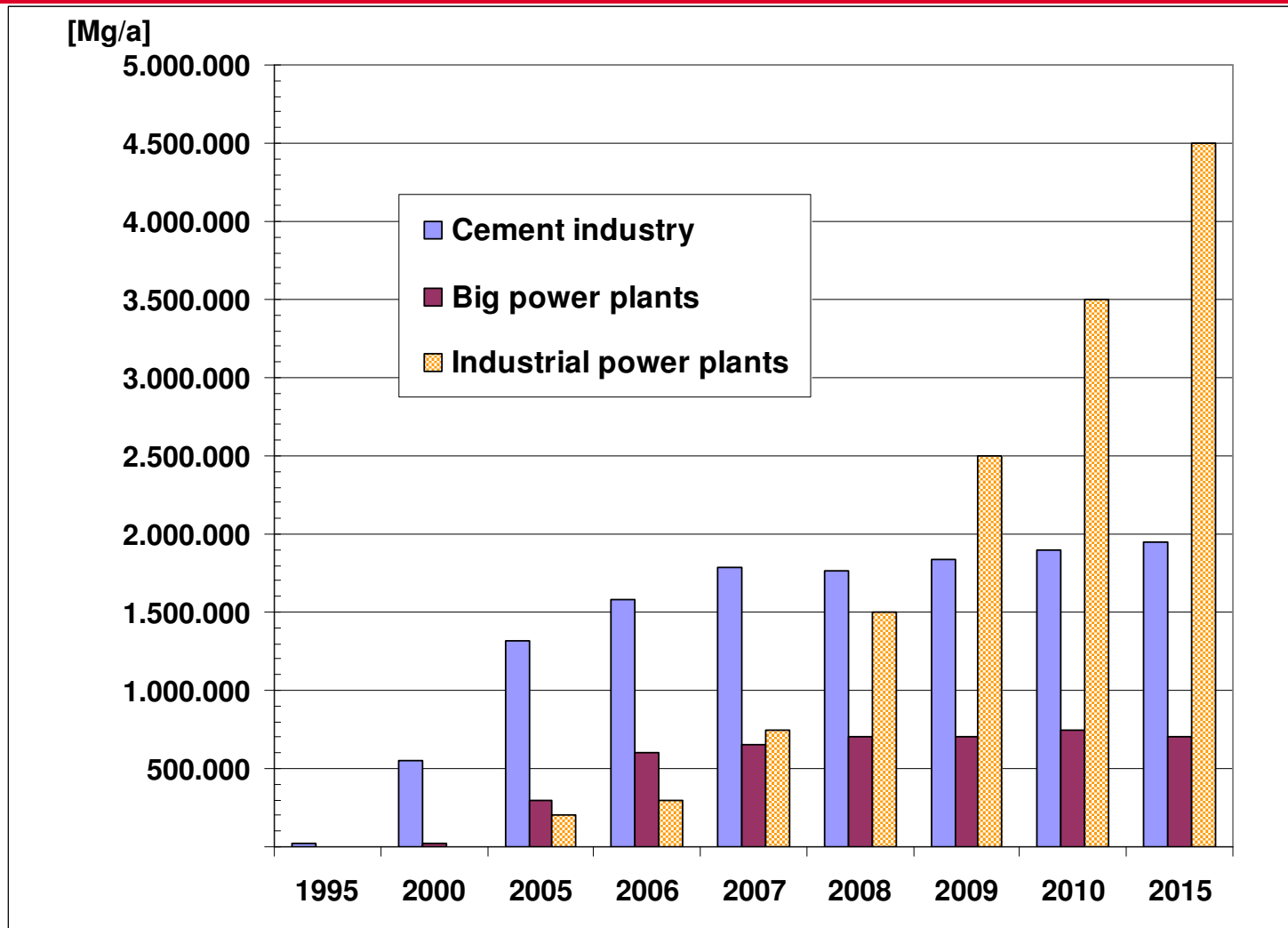
Influence of world economy, taxes for efficient use of SRF counterproductive

Market development of SRF/RDF in Germany



based on production specific wastes and HCF's (10/2011)

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Sum of cement and big power plants stable – dominating industrial power plants