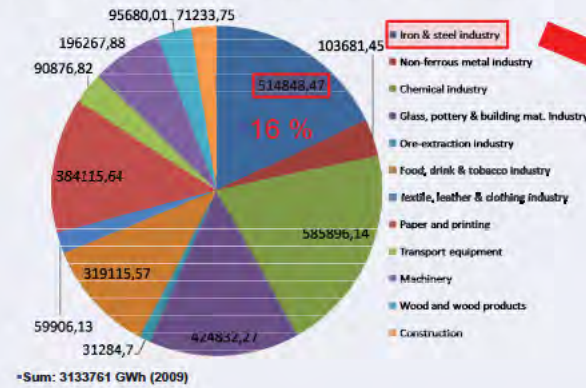
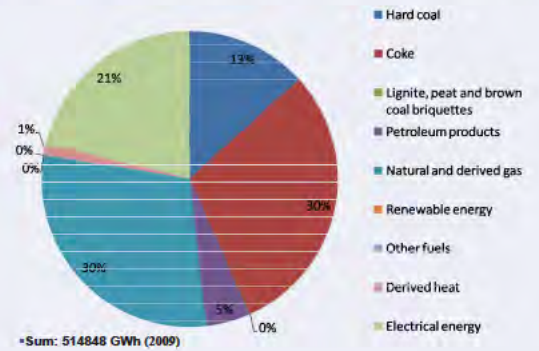


# The scope for Electricity & Carbon Saving in the EU through the use of EPM Technologies

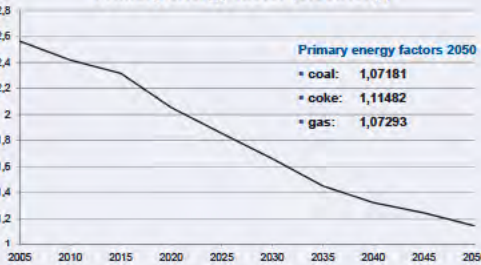
Final energy consumption of the EU-27 industry



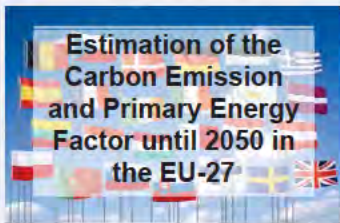
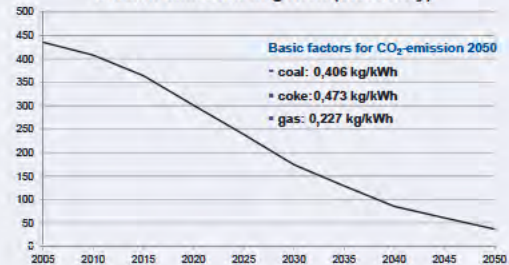
Final energy consumption in the Iron & steel industry of the EU-27



Primary energy factor (electricity)



Carbon emission in g/kWh (electricity)



## 3 scenarios for the future substitution from cupola to induction crucible furnaces till 2050

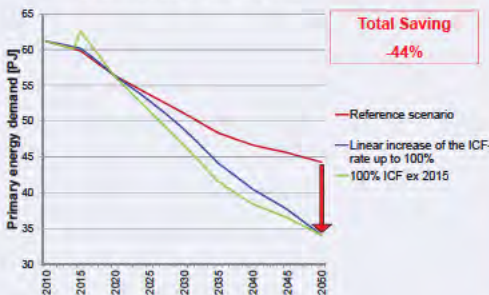
13 Mio. t total Production of cast iron:

- Scenario 1 (Reference scenario):**
  - the share between cupola and induction crucible furnaces remains unchanged
- Scenario 2 (Linear scenario):**
  - the share of the induction crucible furnace increases linearly from 50% to 100%
- Scenario 3 (Shock scenario):**
  - starting in the year 2015 only induction crucible furnaces will be used

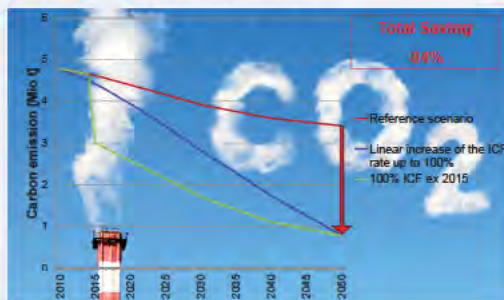
## Final energy demand for cast iron production in the EU-27 in 2010



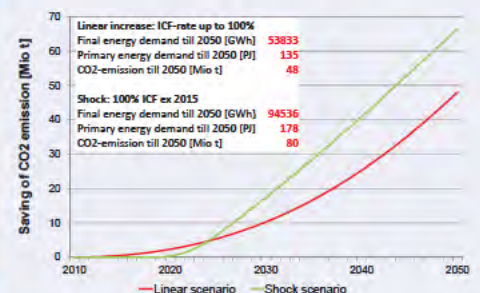
Primary energy demand for cast iron production in the EU-27



CO<sub>2</sub>-emission for cast iron production in the EU-27 in 2010



Carbon and Energy savings until 2050 compared to the reference scenario



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