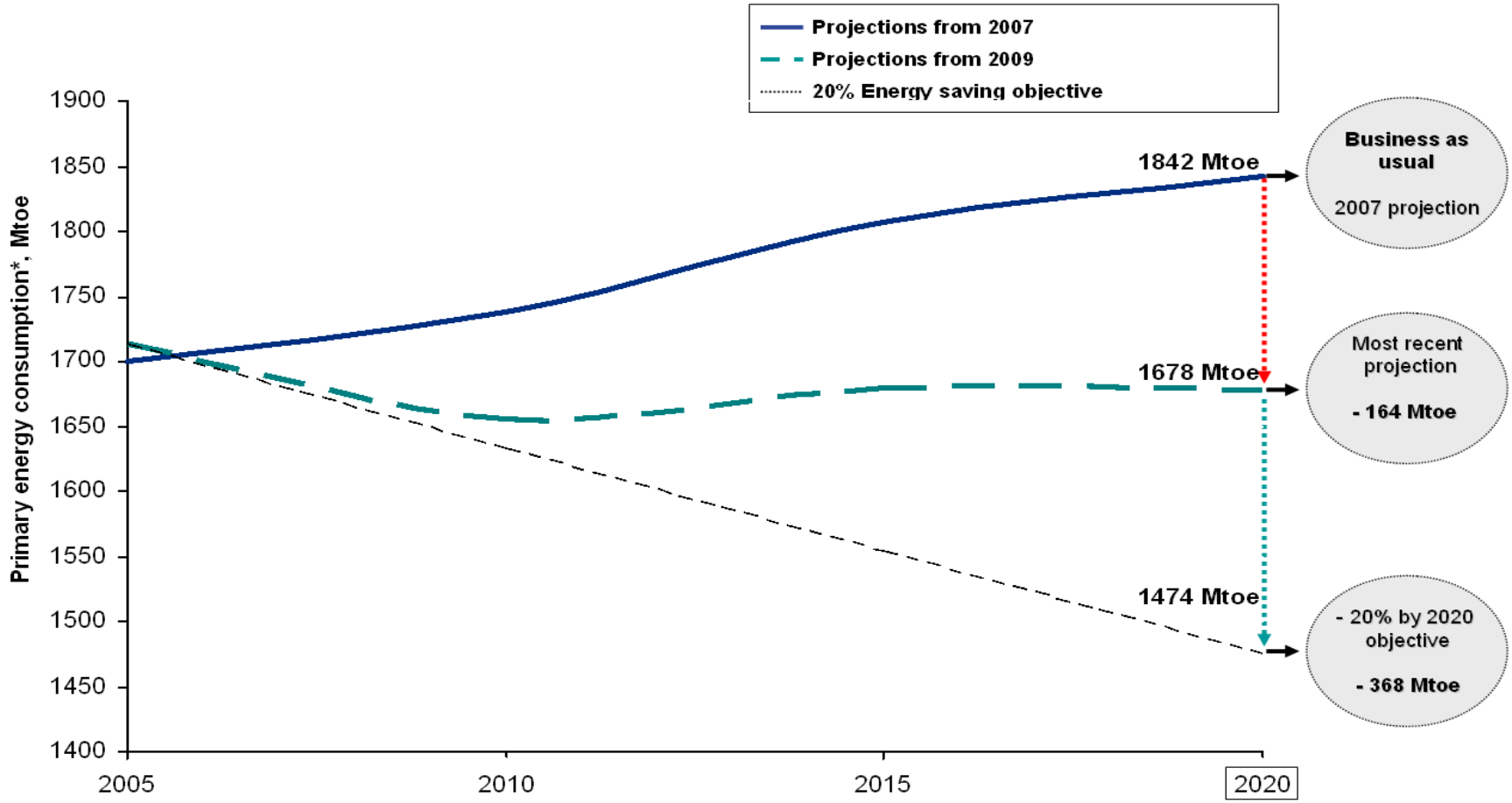
Energy Efficiency Directive – an overview

Birgitta Resvik, Head of Public Affairs Sweden, Fortum Corporation

The objective in the EE-directive

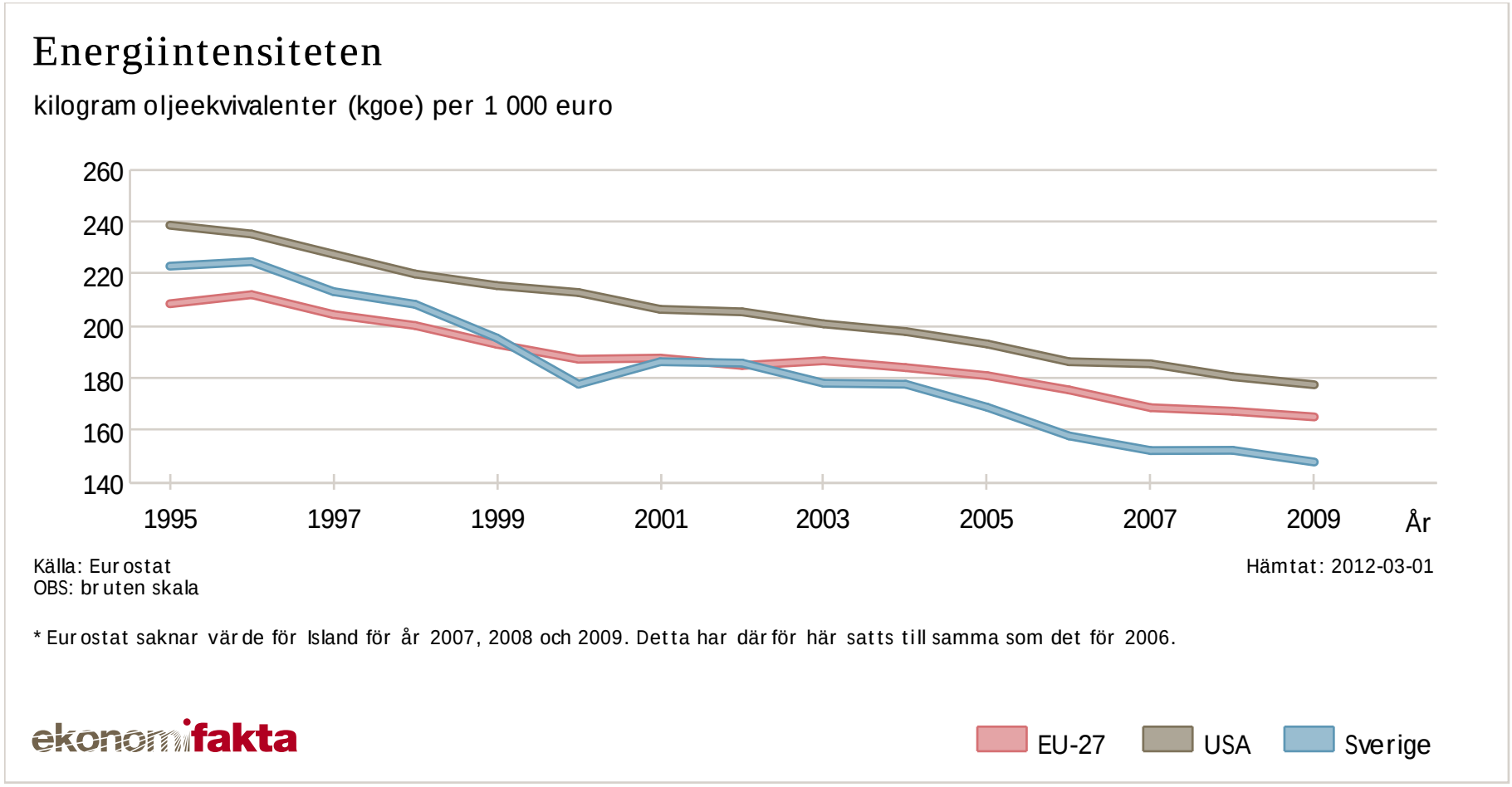
”Each Member State shall set an indicative national energy efficiency target, based on either primary or final energy consumption, primary or final energy savings, or energy intensity.…” (Art 3)



* Gross inland consumption minus non-energy uses

How do we measure energy efficiency?:

Energy Intensity in EU 27, US and Sweden
- 34% in Sweden, - 21% in EU 27 and - 26% in US in 15 years



Energy Efficiency Directive
Still a lot of questions

- Political agreement of EED in June,
- In September EED adopted by European Parliament,
- Implementation on national levels within 18 months after the entry – 4th of June 2014,
- National interpretation will give different outcome,
- Still many questions;
  - Target setting?
  - White certificates?
  - Voluntary argreements?
  - Transportation? Or how to treat early actions?
  - Cost benefit analyses – what sort of status?
  - Incentives for EE in distribution and heat regulation -how?

The focus of the directive

Member States

- Set the target of the energy efficiency
- Show how the incentives give results

Public sector

- Should be a fore-runner
- Public procurement

Buildings

- All buildings in the official sector
- Have a national strategy for retrofitting buildings

Energy sector

- CHP should be promoted
- Measuring and billing more frequently and give better information on the bills

Big industrial companies

- Have to perform an energy audit every 4th year
- Smaller companies should be promoted to have an energy management system

The incentives should be efficient

The national system has to deliver – (art 7)

- Yearly saving which correspond to at least 1,5 (1,125) percent of energy sales to end consumer in volume,
- No need to sell less from a company level,
- The transporation sector might be exempted

Freedom of choice for the Member states

- Either a quata system for energy savings or an alternative mechanism,
- Incentives in all sectors might be counted

Which incentives should be scrutinised?

- Non EU- reglaied steering mechanisms – such as eco-design
- Taxation – energy and carbon taxes
- Voluntary agreements,
- Energy and climate advisors,
- Buildings standars,
- ”Monitoring checks” to small and medium sized companies,
- Rules and definitions of environmental cars,
- Technical procurements,
- etc

Energy Efficiency Agreements (EEA) good experiences from Finland and Sweden

- Voluntary agreements between energy consumers and the government,
- Used widely in Finland and in Sweden for the energy intensive industry,
- Give freedom for consumers to decide ways to improve own efficiency,
- Consumers attracted by limited subsidies for energy efficiency improvements, for example
  - audit subsidy in Finland,
  - tax breaks in Sweden,
- Low implementation costs, lack of mandatory requirements and available subsidies have made EEAs popular within the industry,
- From the government's point of view; do not guarantee a certain delivery of energy efficiency improvements – but it has delivered.
- Carrots not sticks are popular

The Energy Sector (Art 14-15)

CHP should be promoted in EU - high efficient CHP for all thermal power

- By 2016 the Member States should give a thorough analyse of the potential of CHP and district heating and cooling,
- MS to do a cost benefit analyse to identify areas potentially suitable for CHP and DH&C

Cost benefit analyse

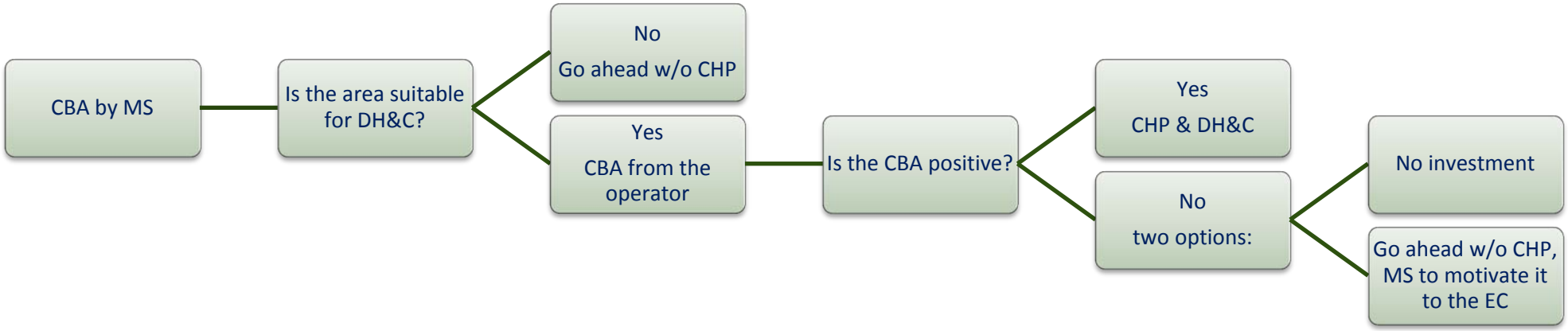
- Operators should carry on a CBA on the appropriateness of developing CHP or DH&C
- Valid for both new and existing plants of more than 20 MW
- Exemption are in any case granted for:
  - Peak load and back-up electricity generating installations
    (< 1,500 operating hours per year as a rolling average over a period of five years)
  - Nuclear power installations
  - Need to accommodate CCS needs

Tariffs on distribution shall be in line with energy efficiency

- Priority dispatching for electricity from high efficient CHP

Promotion of efficiency in heating and cooling (3/4)
(Arts. 10 and 12(5); Annexes VII-VIII)

Cost-Benefit-Analyse



Metering and informative billing – (art 9 – 11)

Final customers of electricity, gas, district heating and cooling and hot water should have individual meters that accurately reflect the final customer's actual energy consumption if it is;

- technically possible,
- financially reasonable and
- proportionate in relation to the potential energy savings

Measuring heat, cooling and hot water;

- Individual measuring in buildings and appartments where it is technical feasable and cost effecient from 2017

Billing information

- Member States shall ensure, not later than 1 January 2015, that billing information is accurate and based on actual consumption

Energy services – art 16

Market for energy services shall be promoted

- Information about different price models and economic support
- Promote quality marketing,
- To provide list of available energy services
- See to companies on the energy services market not compiting un fair –

Awareness the start of Energy Efficiency

Fortum helps the consumer to be more active

- The consumer should be responsible for their consumption,
- The energy companies can and will help the consumer to be aware by ex. visualisation,
- Hourly metering will be introduced the coming years,
- New business models will be developed,
- Energy services will be asked for as prices increase and can be marked based,
- Need of flexibility.