Estimation tool for National effects of ecodesign and labeling

Method and results for TV and Lighting in Sweden

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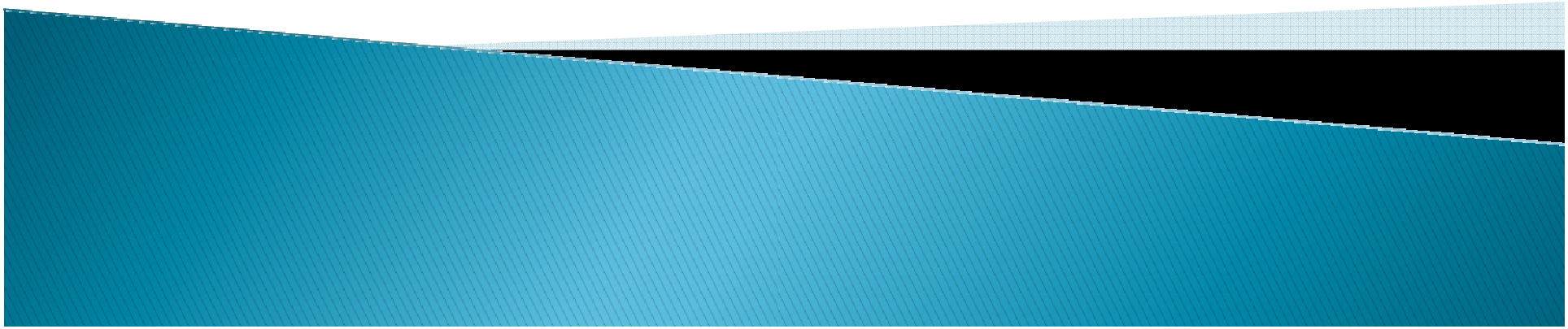

Presentation

- Why this tool?
- Method description
- LIVE demo of tool
- Selected results
- Future plans
- Final comments from Swedish Energy Authorities

Why the tool

- EU preparatory studies for each Lot
- EU Impact assessments
- But:
- There are significant differences between EU average and specific countries
- Countries may have better data for their region than used for EU
- Most important: alternative scenarios can be made, also before negotiations in EU:
  -other limits
  -other timing

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Method in short

- Classic bottom-up stock model:
  - calculating the stock from sales and assumed lifespans (Normal distribution)
  - keep track of each vintage of sales and how sales distribution were in terms of efficiency
  - project the total sales of the product, e.g. following macro-params
  - project the future sales distribution
  - calculate the future stock
  - add operating hours etc. to get the consumption

Method input requirements

- sales data, split by efficiency classes
  - can make your own classes or use the given ones from EU
- operating hours
- lifespan average and standard deviation
- For baseline: the expected, average change in sales distribution
- For scenarios:
  - the eco-design criteria and timing
  - the estimated sales change from labeling

Model outputs

- the sales (and derived stock) for each year in the period, split by energy class
- each year all sales by energy classes are calculated as lasts years fractions, but adjusted according to:
  - ecodesign: if a class is out due to regulation, the sales are transferred to next valid energy class
  - labeling: a fraction for each class defined by the operator is moved to next energy class

Model outputs

- DEMO

Selected outputs

- Colour TV in Sweden:
- Ecodesign effects estimated to 300 GWh/year savings by 2020
- Ecodesign+Labeling 900 GWh/year by 2020

- Lighting (homes) in Sweden
- Ecodesign effects estimated to 0,96 TWh/year savings by 2020
- Ecodesign+Labeling 1,0 TWh/year by 2020

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Future plans

- TV and Lighting were “tests”
- Some 10-15 product Lots will be treated in 2012
- General improvements of the model
- Data exchange between Sweden and Denmark
- Other countries…?

Final comments

- Linn slide 1

Final comments

- Linn slide 2

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- ELMODEL-domestic
- Data operator for DEST
- Eco-design / Labeling effect scenarios
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