



# *Energy Demand in Ireland*

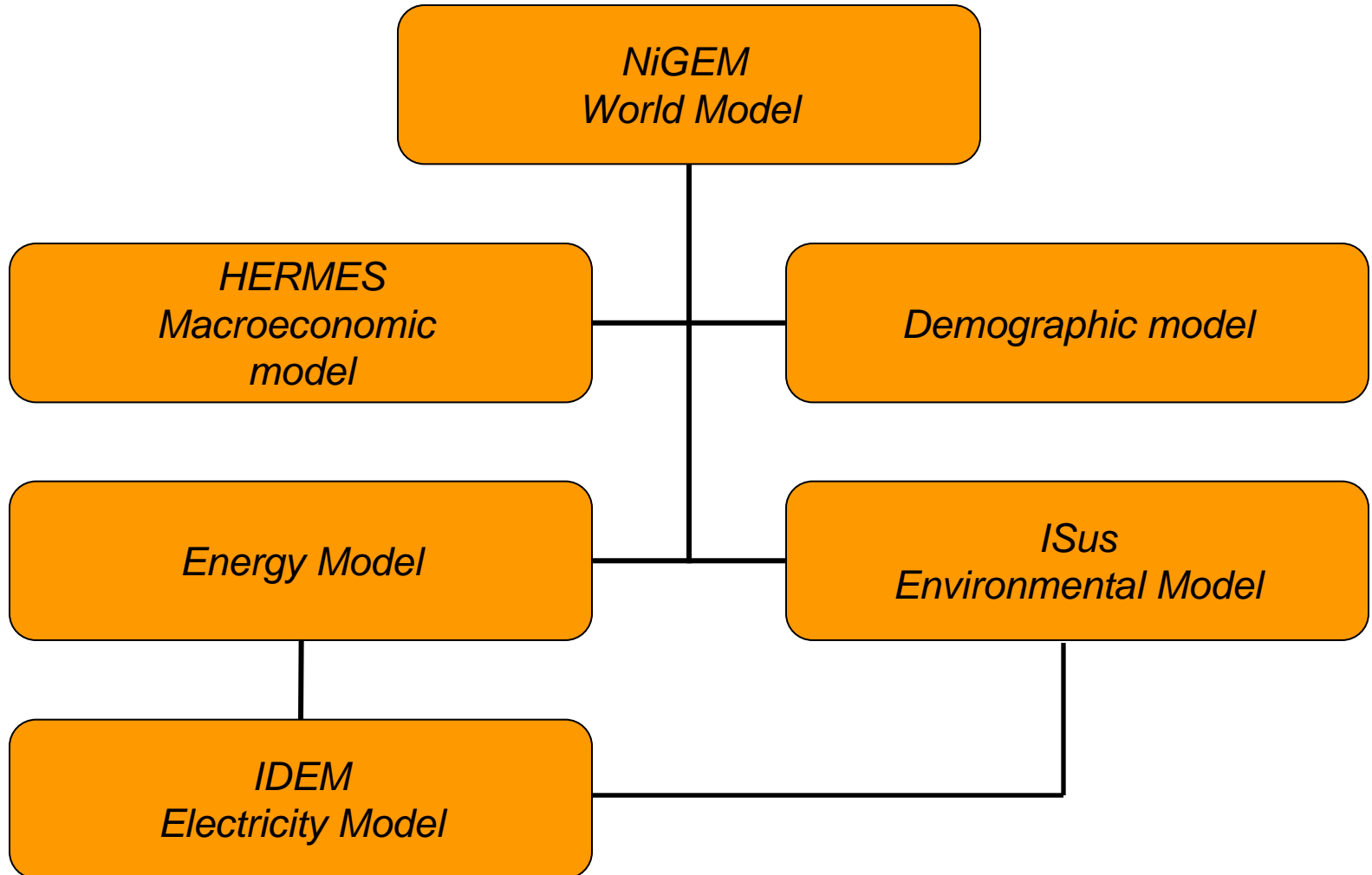
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*Economic and Social Research Institute*

# *Modelling structure*

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# *Energy model*

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- *HERMES calculates energy demand by sector*
- *5 Sectors*
  - *Industry*
  - *Household*
  - *Services (commercial and public)*
  - *Agriculture*
  - *Transport*
- *Use different fuels*
  - *Fossil fuels (coal, oil, peat, natural gas)*
  - *Electricity*
  - *Renewable energy*

# *Electricity model*

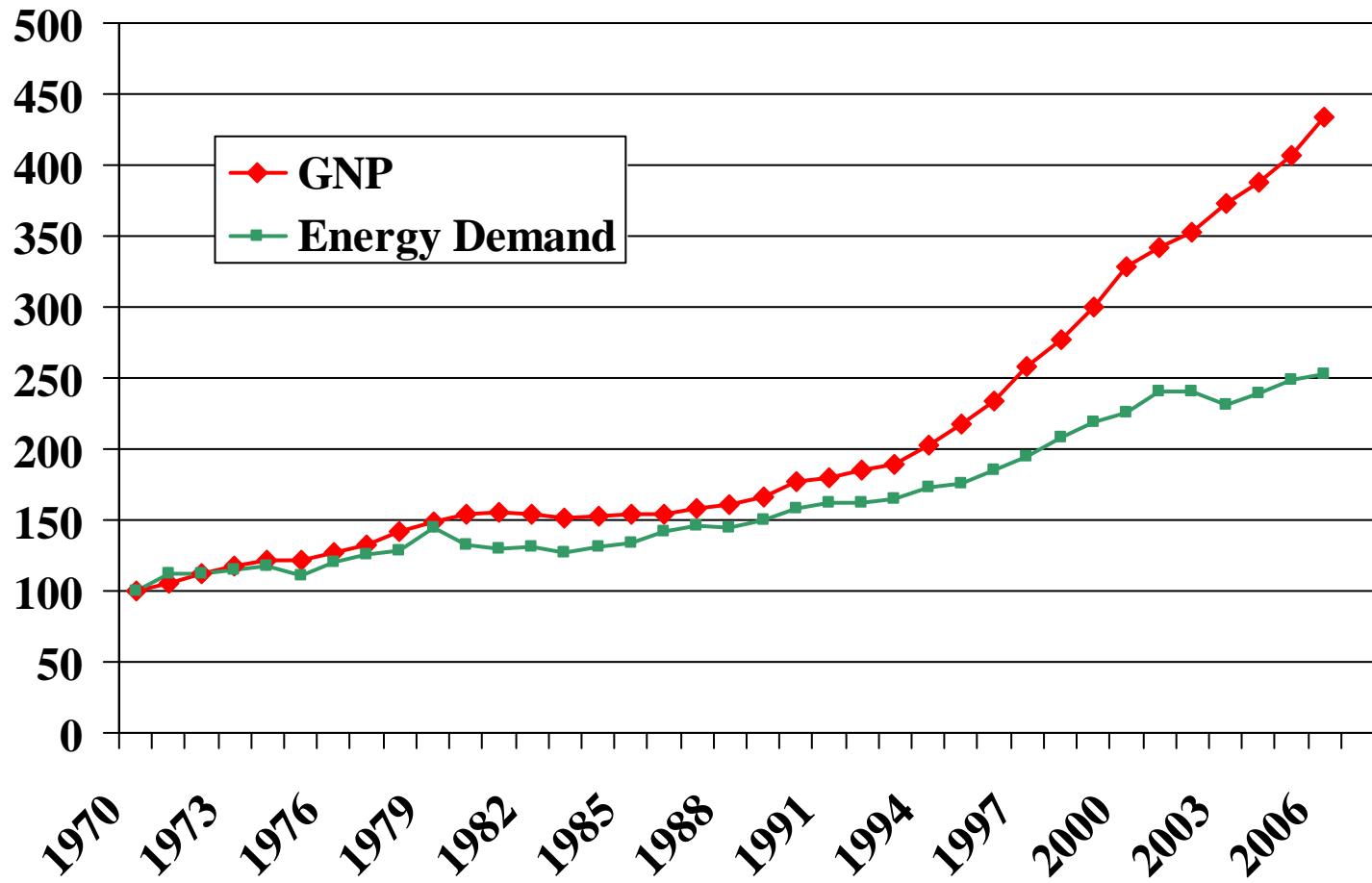
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- *Takes HERMES demand*
  - *calculates electricity generation needed to meet demand at minimum cost for every half hour of year*
  - *Calculates consumption of fuel in electricity generation*

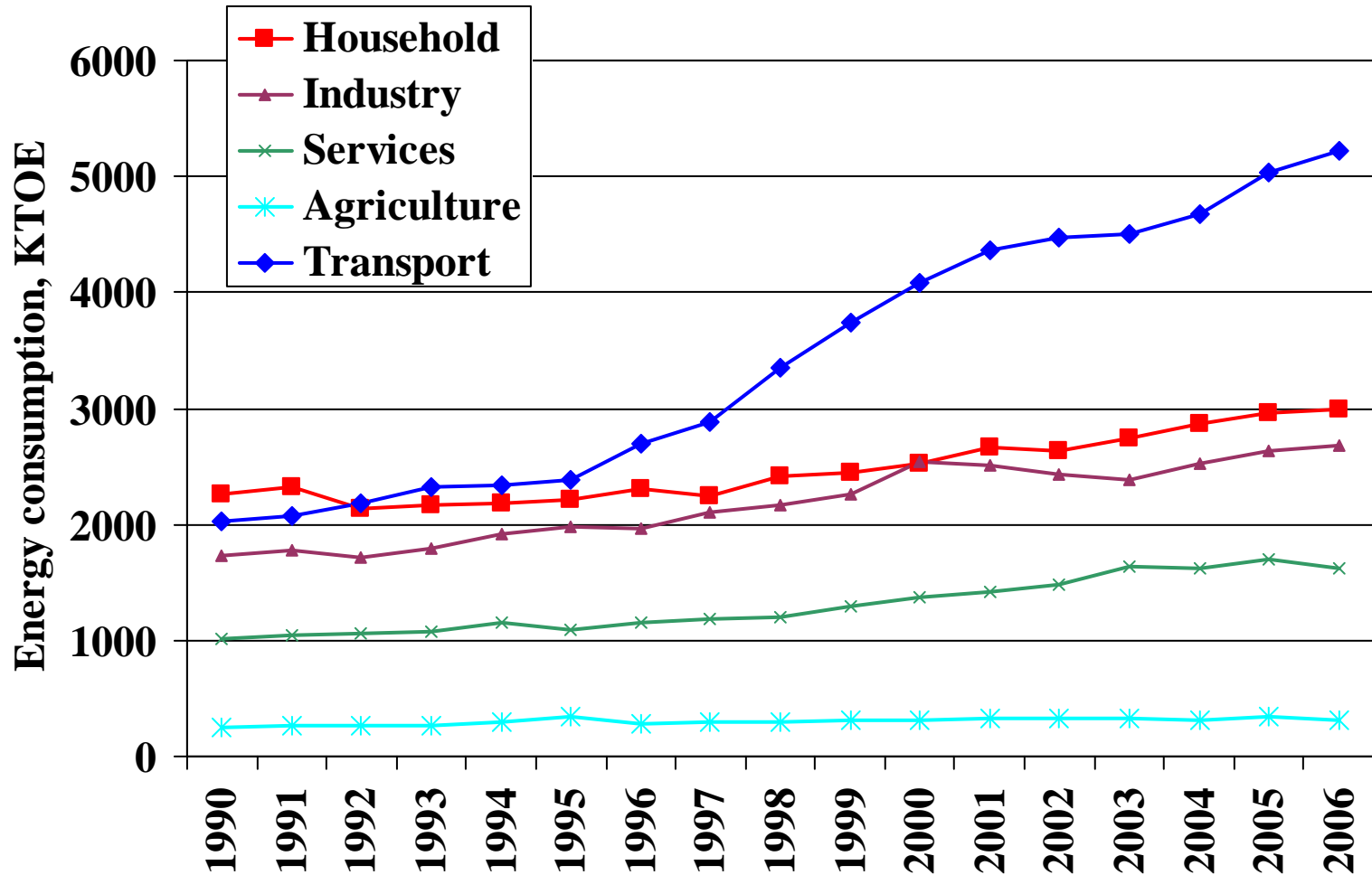


# *Primary Energy Demand and GNP*

*(includes fuel used in electricity)*



# *Final consumption by sector*



## *Final energy consumption by sector*

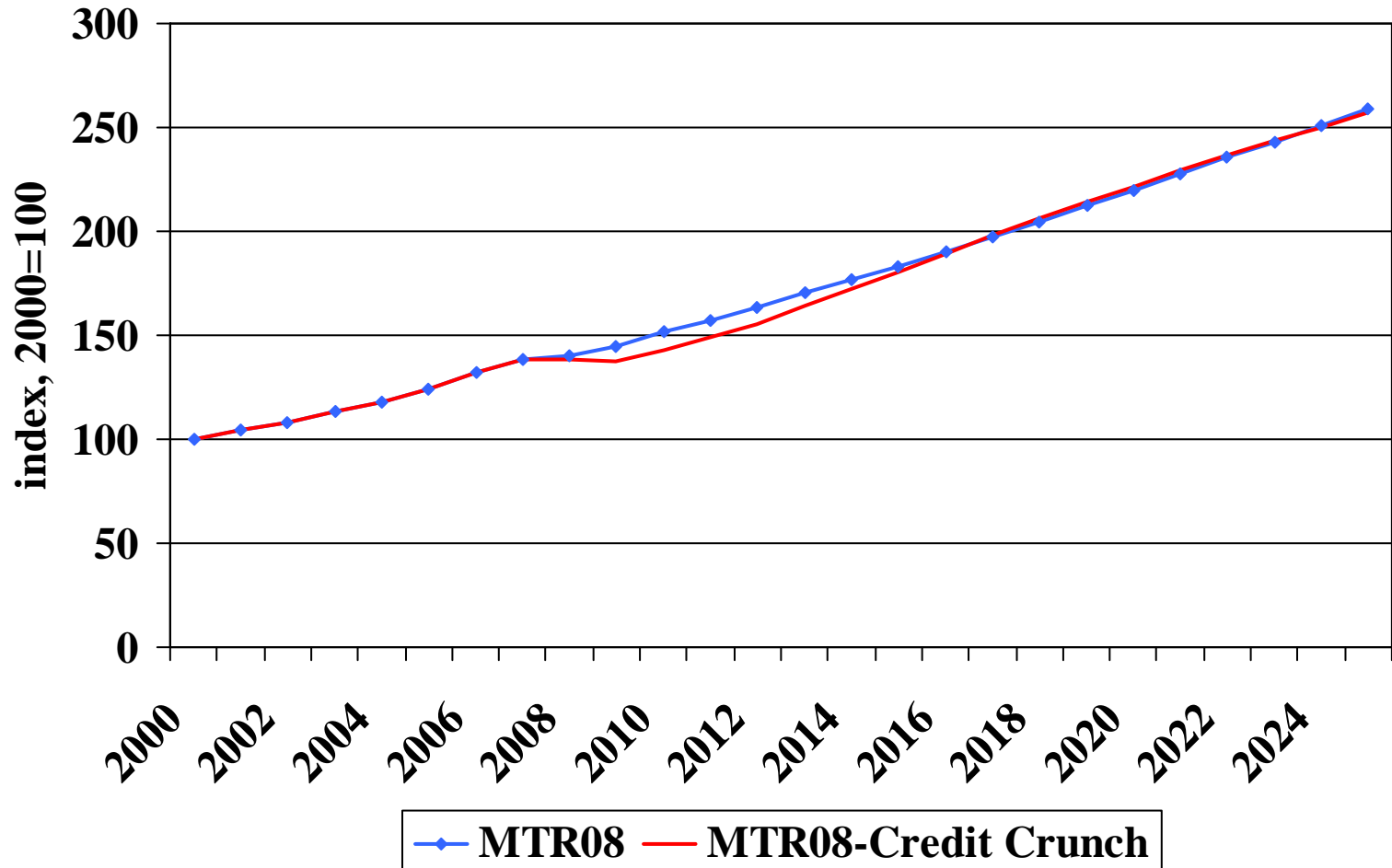
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	<i>(measured in Tons of Oil Equivalent (TOE))</i>	
	<b>Share 2006</b>	<b>Growth rate 2000-2006 p.a.</b>
<b><i>Transport</i></b>	41	4.8
<b><i>Household</i></b>	23	2.9
<b><i>Industry</i></b>	21	0.9
<b><i>Services</i></b>	12	2.9
<b><i>Agriculture</i></b>	2	0.3

*Source: SEI, Energy in Ireland*

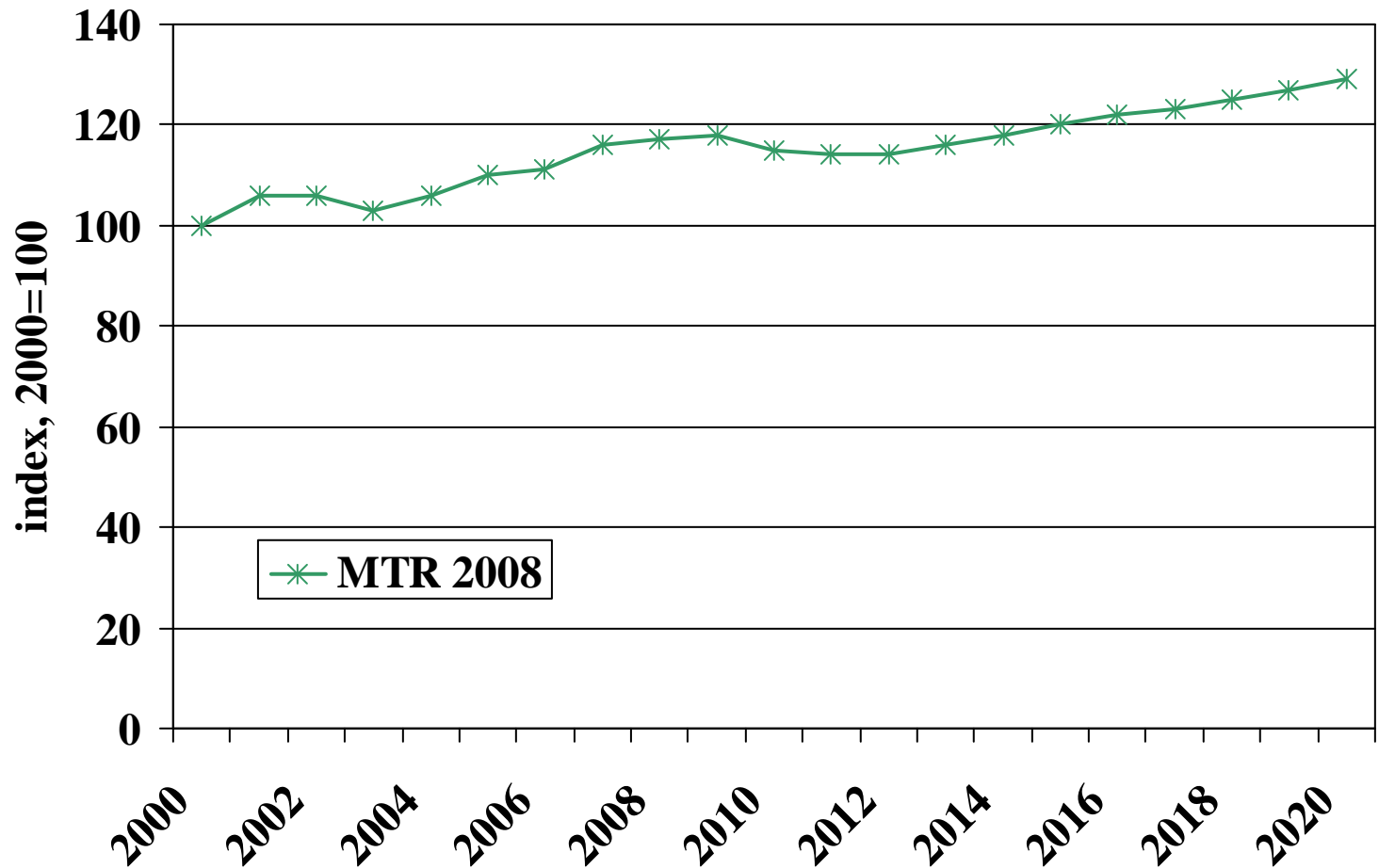


# *Forecast: GDP growth assumptions*

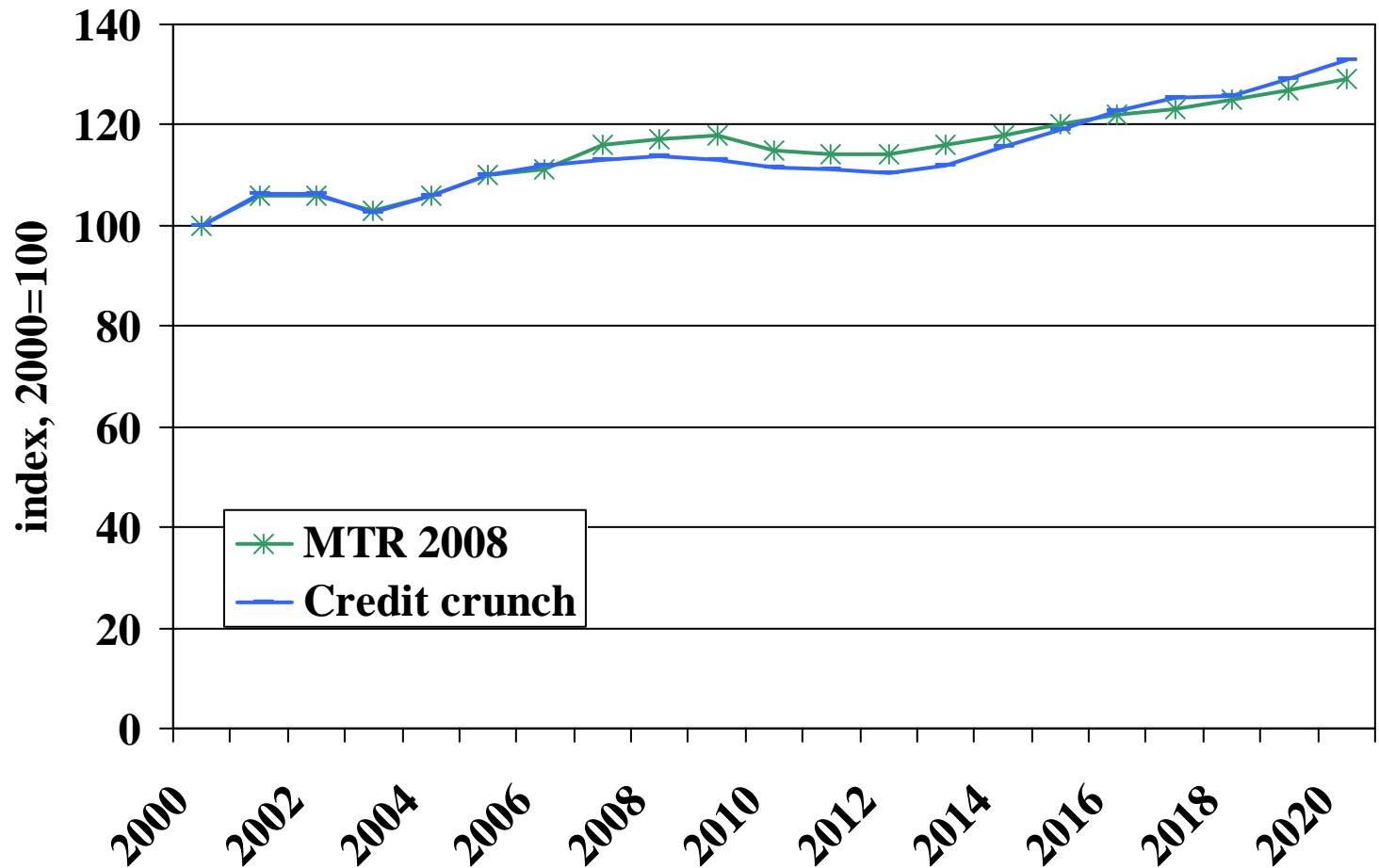




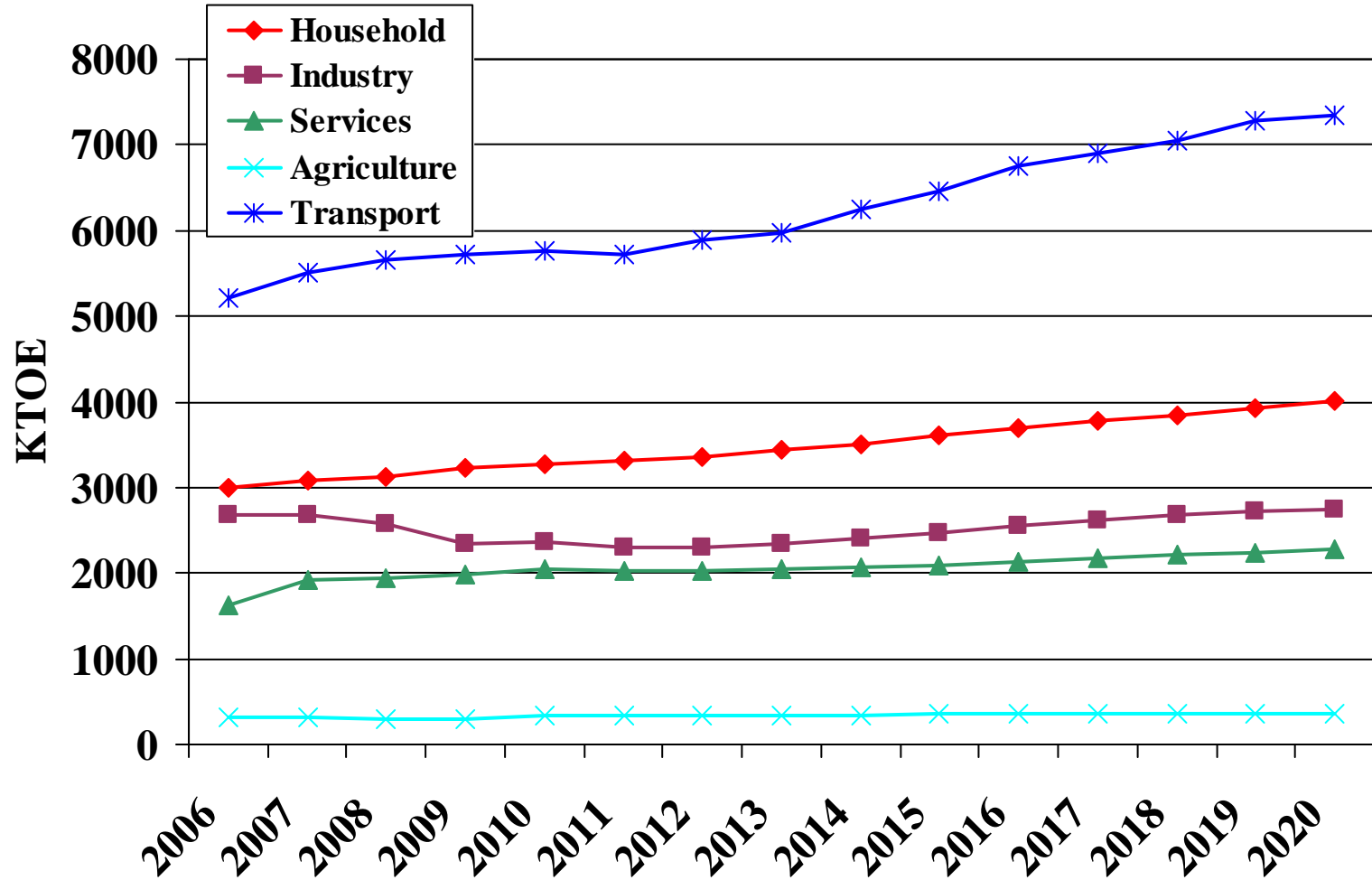
# *Energy demand forecast*



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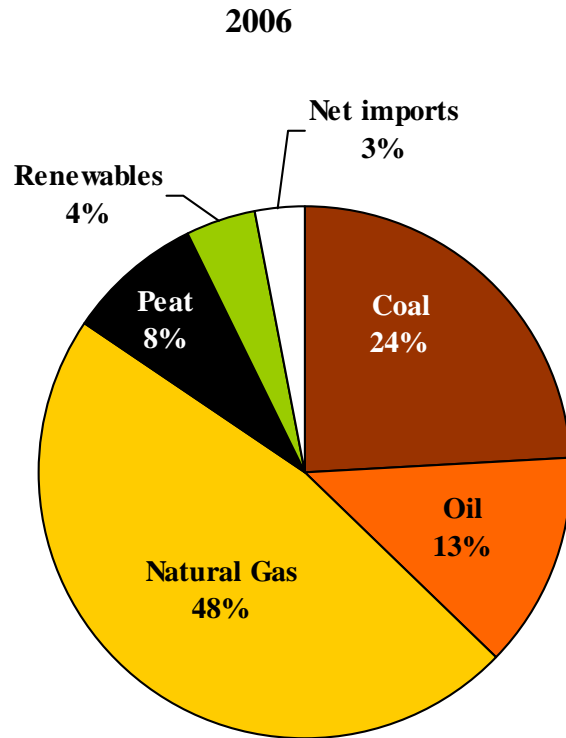


# *Credit crunch – by sector*



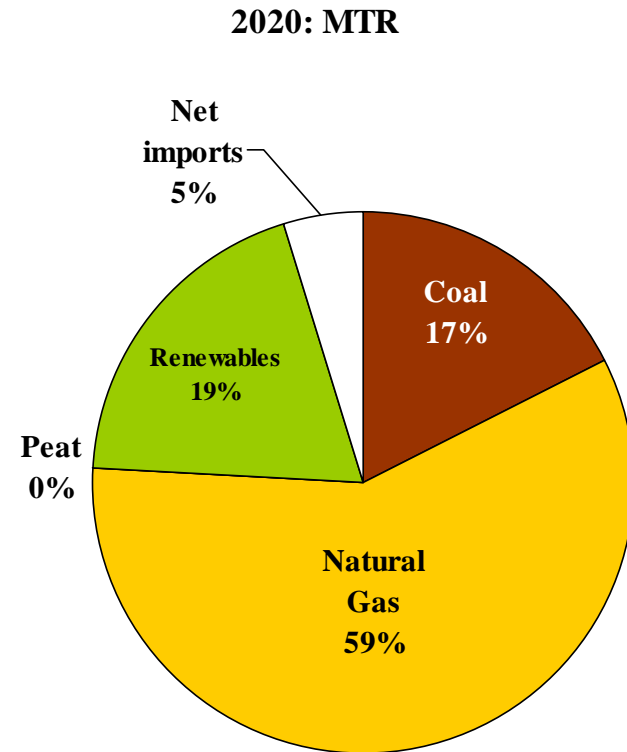


# *Fuel consumed in electricity generation*



*Total energy used: 5052 KTOE*

*Wind installed: about 600MW*



*Total energy used: 4651 KTOE*

*Wind installed: about 3000MW (ROI)*