



# Renewable energy

Pärnu-Jaagupi Gümnaasium

Estonia



Education and Culture DG

Lifelong Learning Programme

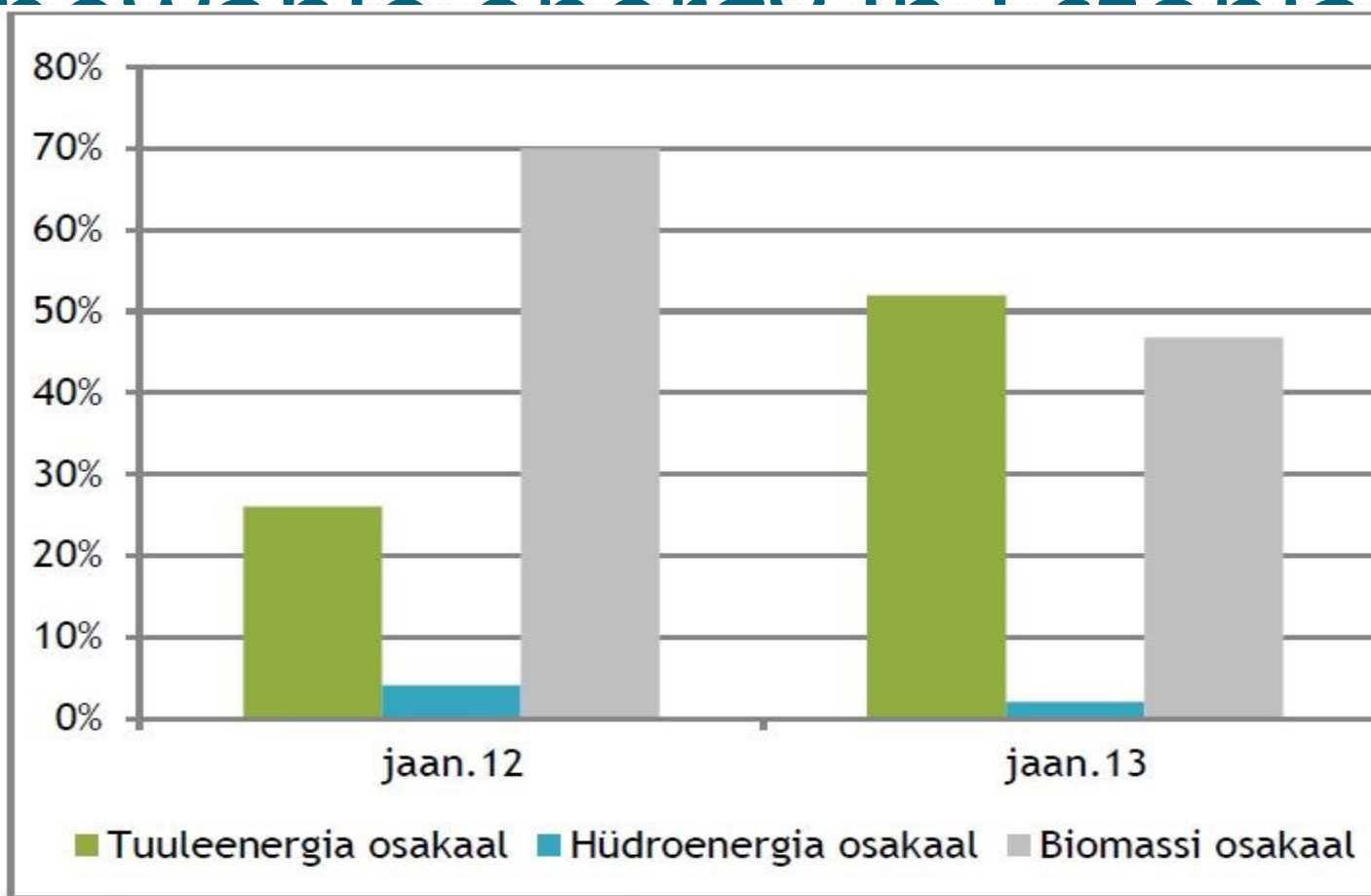
# Renewable energy

- is generally defined as energy that comes from resources which are continually replenished on a human timescale such as:
  - Sunlight
  - Wind
  - Geothermal heat
  - Tides
  - Waves
  - Biomass


# Renewable energy in Estonia

- 92% of energy is produced from non-renewable energy resources
- Mainly from oil shale
- Only 8% of energy is produced from renewable energy resources

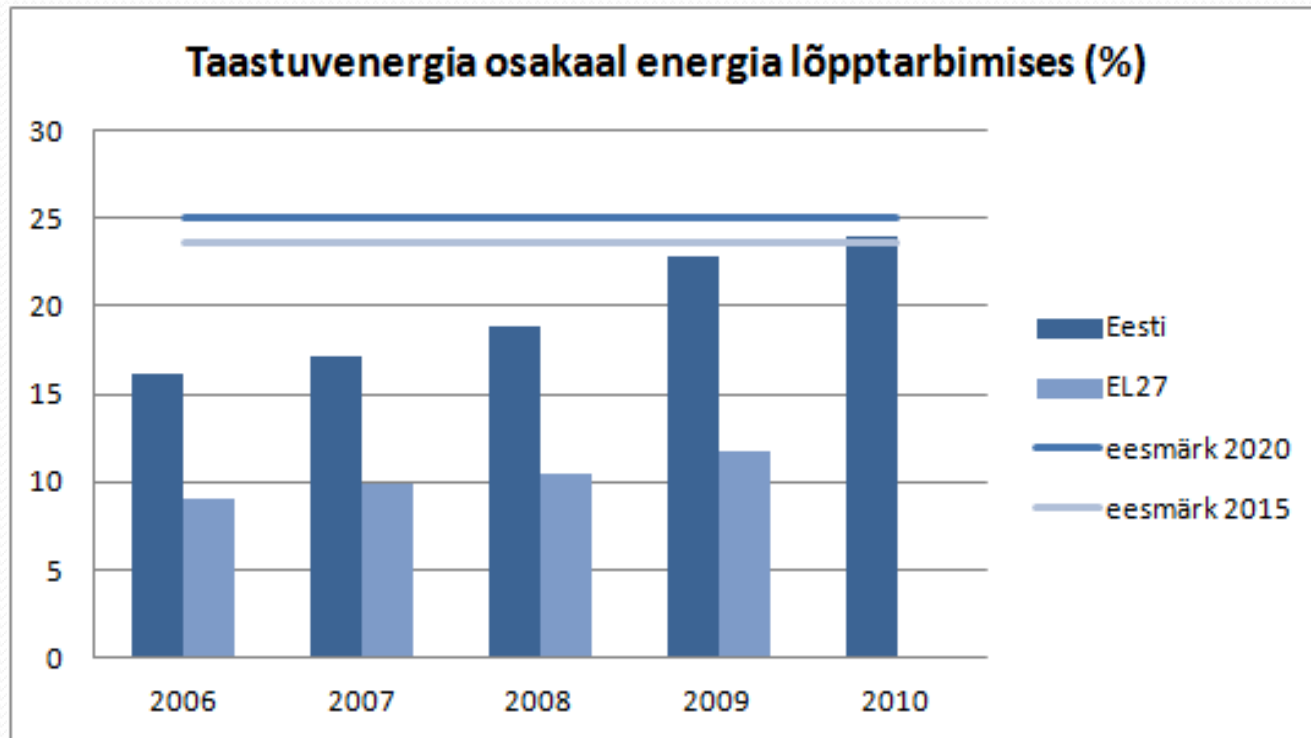
# Renewable energy in Estonia



*Taastuenergia tootmise jaotus jaanuaris 2013. ja 2012. aastal*

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- About 70% of renewable energy comes from wind
  - 25% comes from biomass
  - Only 5 % from water

Estonia aims to get 25% of its energy from renewable sources by 2020..



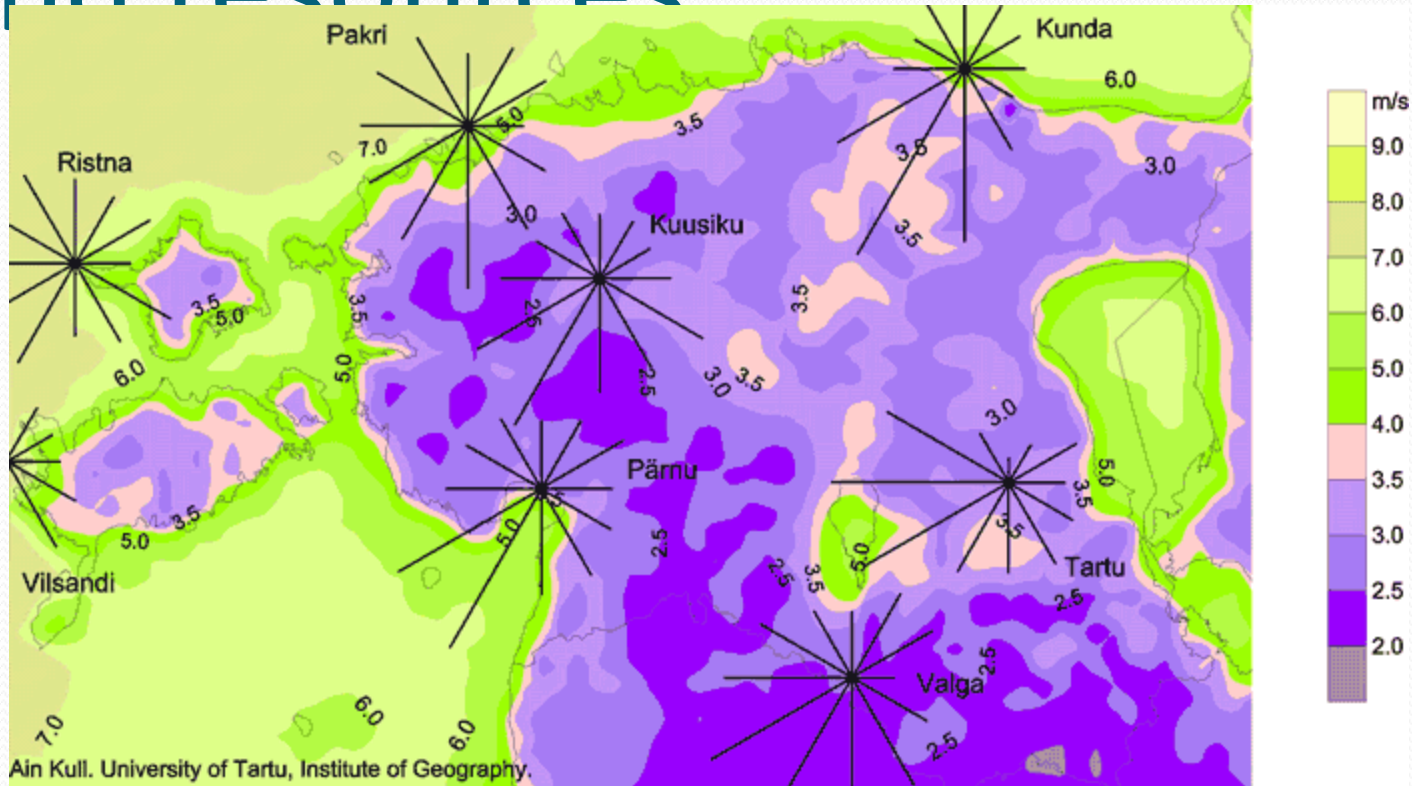
# Wind energy in Estonia

- There were 126 wind turbines with a total capacity of 269,40MW installed by the end of 2012 in Estonia. See the table of the existing wind turbines and windfarms in Estonia: Wind energy statistics (end of 2012).
- In 2012 the wind turbines produced 448 GWh of energy, which is about 5,5% of the total electricity consumption in Estonia.





# Wind resources



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# Hydro-energy

- the use of hydro-energy in Estonia is limited; it is estimated that 30 MW could be produced, but only a third of this theoretical amount is actually usable.
- There are quite a lot of hydroelectric plants in Estonia, but on a global scale these are still micro hydroelectric plants.

# Linnamäe plant



# Biofuels

- Biomass is produced from low-quality wood, scrub, reeds and agricultural waste. Estonia has large resources of biomass, and its renewal period is similar to the average human lifespan.
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- The low environmental impact of biomass a

# Biomass, sawmill chips, peat



# Targets by 2020

- The EU aims to get 20% of its energy from renewable sources by 2020..



THANK YOU!