FOX
FOrest Carbon Sink Optimization Model

The role of enforcement in ensuring forest sustainability

13.06.2023

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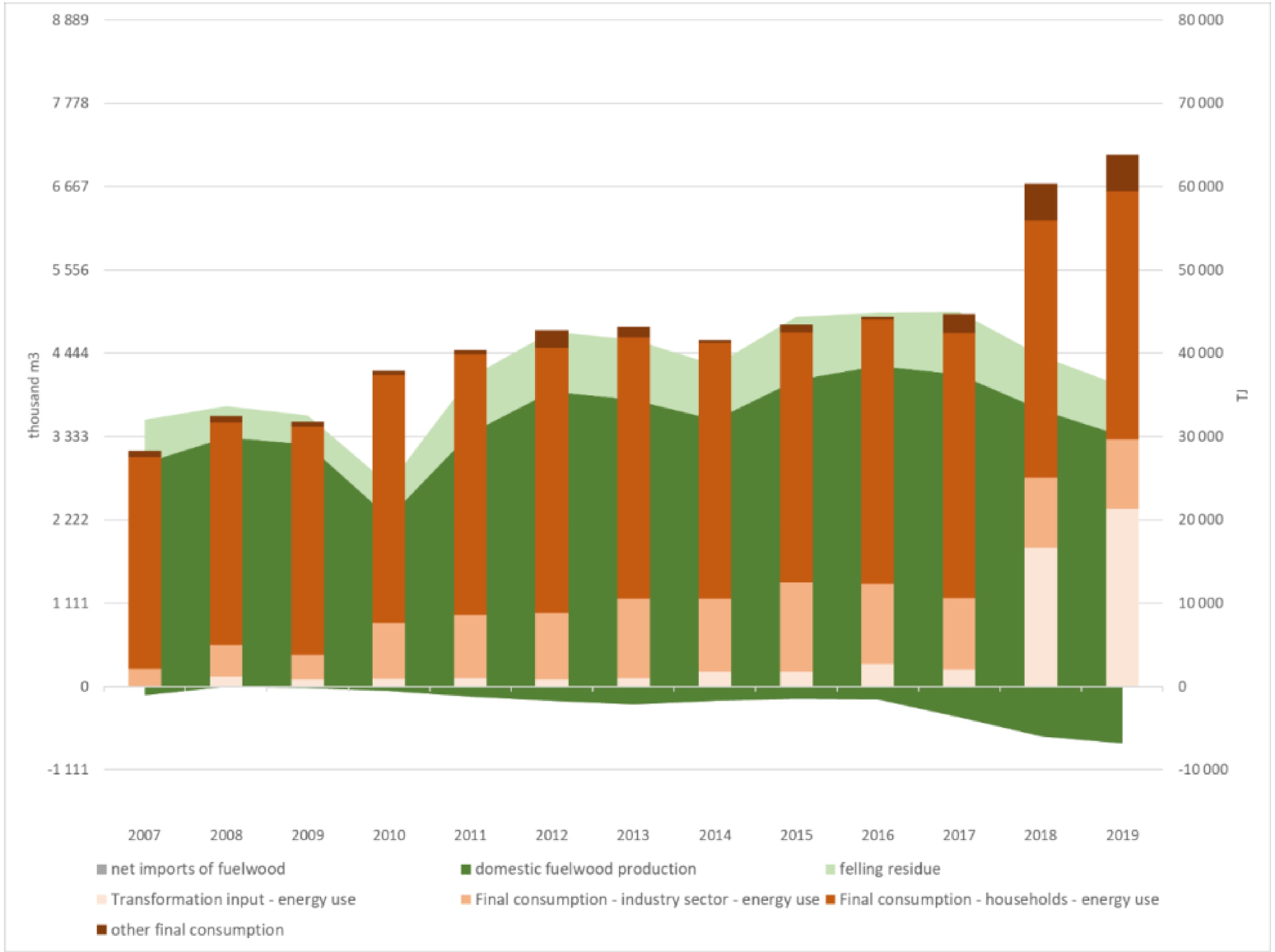
In several countries of Central and Eastern Europe we find serious gaps between official data on supply and demand of solid biomass for energy

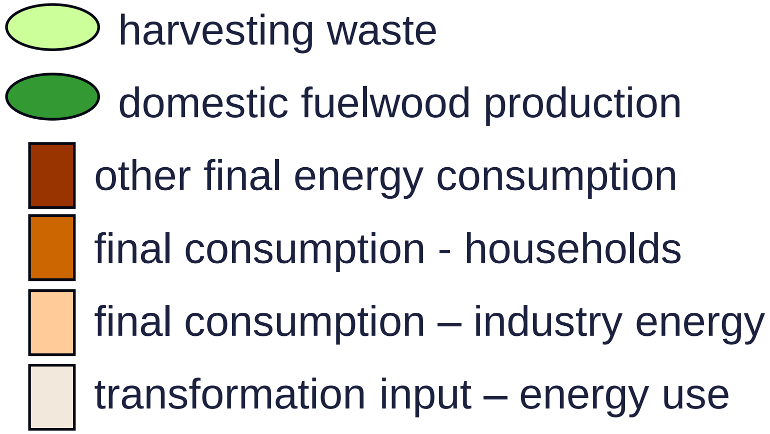
- there are issues about methodology both in forestry and energy statistics
- poor enforcement of harvesting limits is one of the possible culprits

Concerns about intensity of harvesting all over Europe

- enforcement of harvesting limits ever more important
- growing demand for independent verification of self-reported forestry data

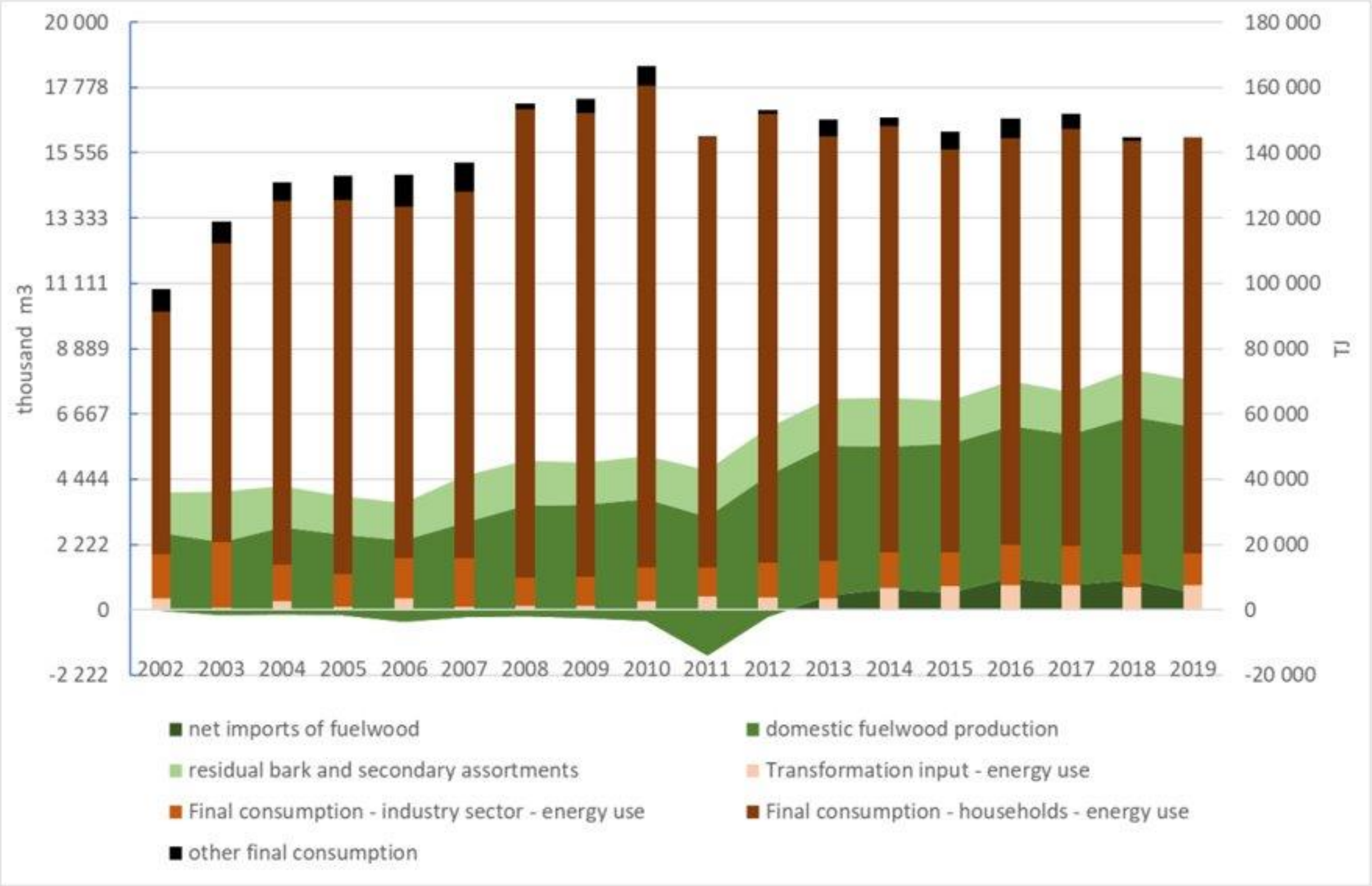
Gap between the supply and demand side of solid biomass energy consumption in volume (thousand m3) and in energy units (TJ) – Bulgaria, 2000-2019





Source: chart by REKK and WWF BG based on EUROSTAT and information from the Executive Forestry Agency of Bulgaria

Gap between the supply and demand side of solid biomass energy consumption in volume (thousand m3) and in energy units (TJ) – Romania, 2000-2019



harvesting waste

domestic fuelwood production

net imports of fuelwood

other final energy consumption

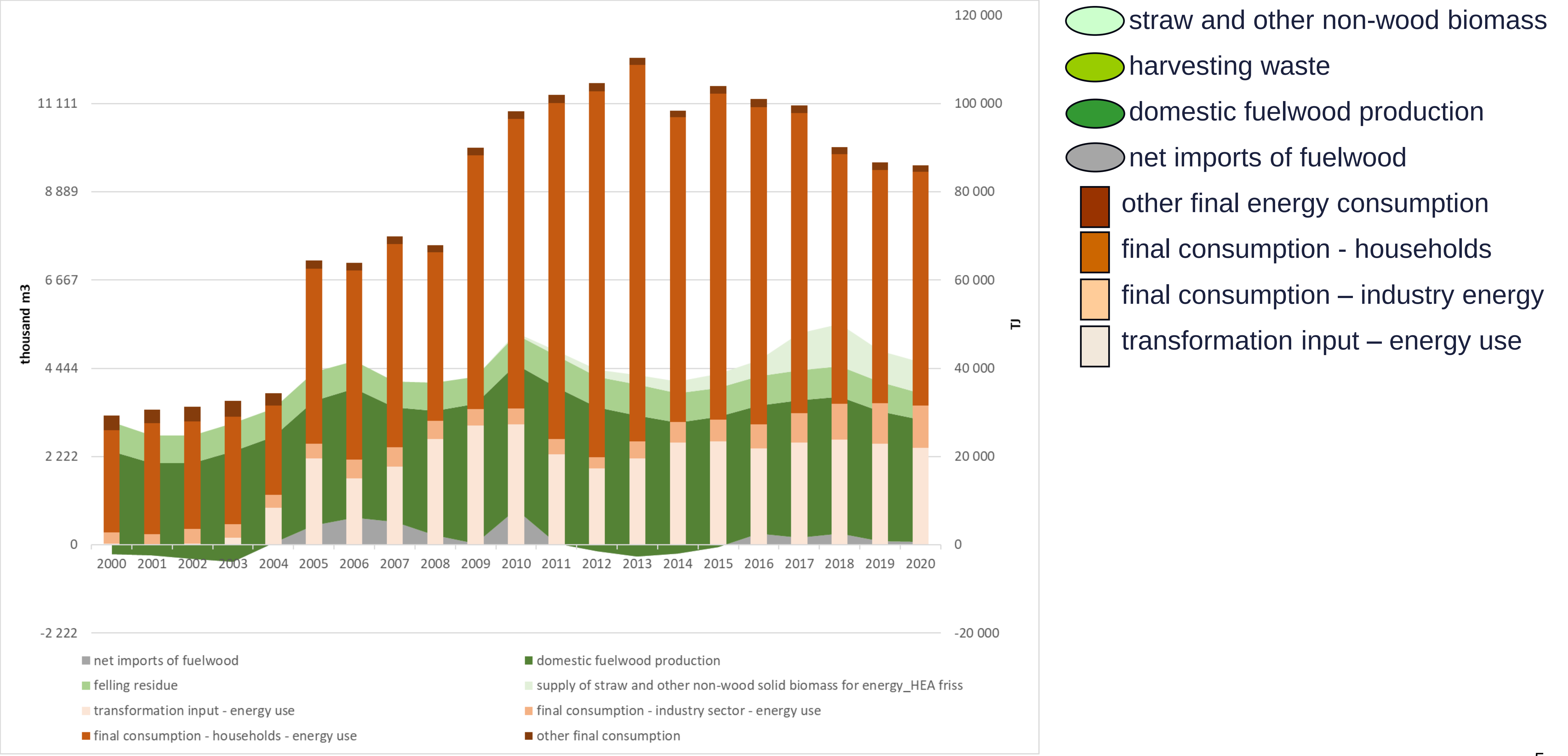
final consumption - households

final consumption – industry energy

transformation input – energy use

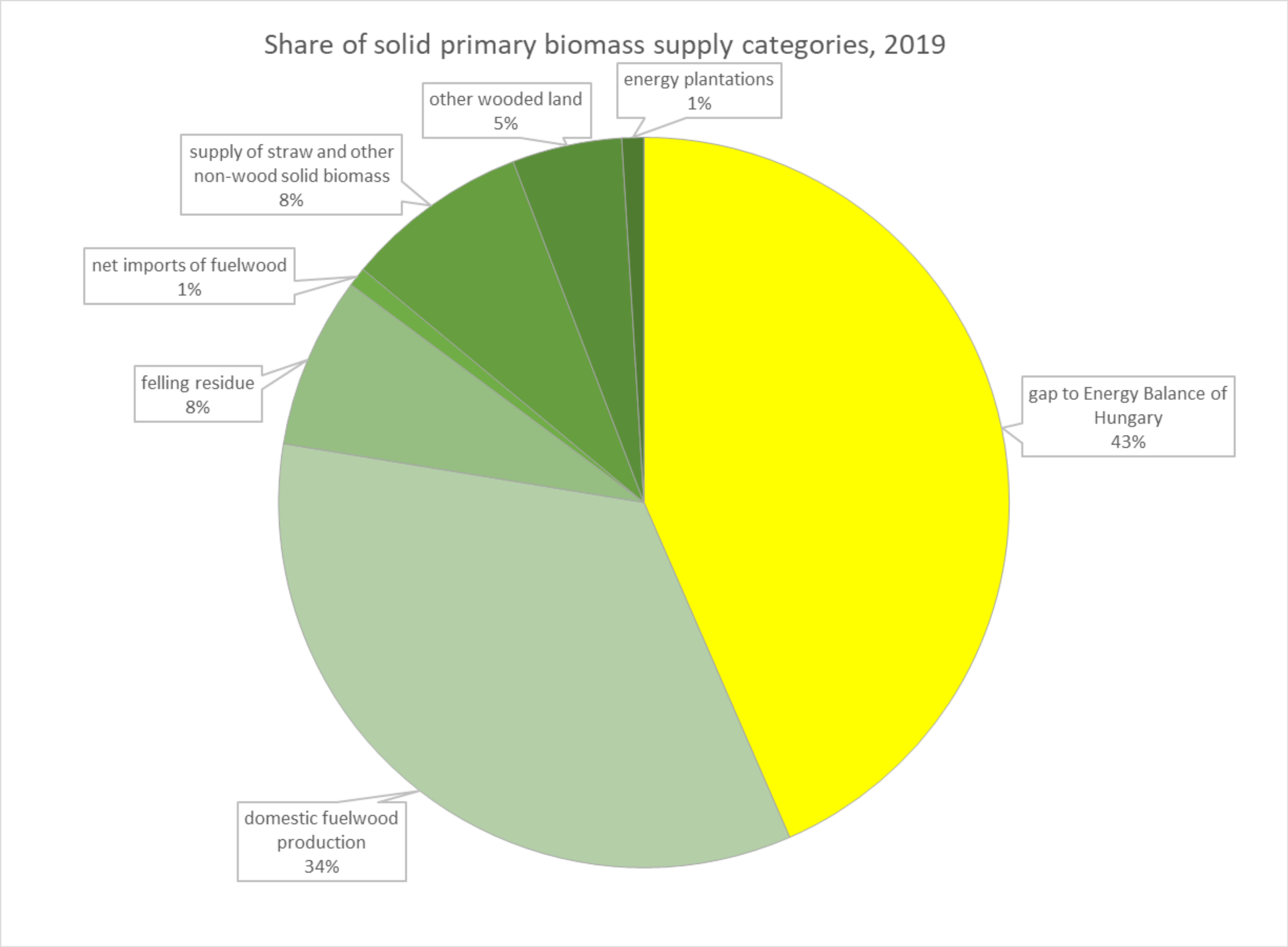
Source: chart by REKK, own calculation based on data from the National Institute of Statistics of Romania, Eurostat

Gap between the supply and demand side of solid biomass energy consumption in volume (thousand m3) and in energy units (TJ) – Hungary, 2000-2019



Source: chart by REKK based on data from Hungarian Energy Authority, Central Statistical Office, Eurostat, National Forestry Authority

Biomass energy supply-demand gap with estimated additional supply from energy plantations and non-forest wooded lands – Hungary, 2019



Own calculation based on data from HEA, Central Statistical Office, Eurostat, NLC

Concerns about increased harvesting over Europe

„Abrupt increase in harvested forest area over Europe after 2015” (Ceccherini, G. et. al, in Nature, Vol 583., 2 July 2020)

- research done by Joint Research Centre (JRC) of the EU Commission
- based on fine-scale satellite data
- increase in the harvested forest area (49 per cent)
- an increase in biomass loss (69 per cent) over Europe for the period of 2016–2018 relative to 2011–2015
- the average patch size of harvested area increased by 34 per cent across Europe
- The increase in the rate of forest harvest is the result of the recent expansion of wood markets, as suggested by econometric indicators on forestry, wood-based bioenergy and international trade.

Findings challenged by severeal critics, including European Forest Institute (EFI)

Thank you for your attention!

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