

EMISSION FACTORS FOR IMPORTED ELECTRICITY

MODELLING OF USEFUL ENERGY DEMAND IN TRANSPORT

PRESENTER: PHD ALEKSANDAR DEDINEC MACEDONIAN ACADEMY OF SCIENCES AND ARTS

EMISSION FACTORS FOR IMPORTED ELECTRICITY

- In 2013 we participated in the process of TNC development.
- We modeled several groups of scenarios (QERLC, EU and BAU) using the top-down approach (CO2 tax)
- The highest targets were achieved with ELC import as most suitable option. IS THIS THE RIGHT WAY?



EMISSION FACTORS FOR IMPORTED ELECTRICITY



EMISSION FACTORS FOR IMPORTED ELECTRICITY

"The CBA will aim to ensure that the price of imports reflect more accurately their carbon content. It should reduce the risk of carbon leakage. Carbon leakage refers to the situation that may occur if, for reasons of costs related to climate policies, businesses were to transfer production to other countries with laxer emission constraints. The CBA should apply to selected industries at risk of carbon leakage. The precise design of the measure is yet to be defined. It would be an alternative to the measures that address the risk of carbon leakage in the EU's ETS. All possible options will have to factor in the carbon price of the EU ETS."



EMISSION FACTORS FOR IMPORTED ELECTRICITY



EMISSION FACTORS FOR IMPORTED ELECTRICITY

- Neighbor countries installed capacities (GW)
- Evolution of MK import/export balance



Source: Strategy& analysis, MEPSO, ENTSO-E

MODELLING OF USEFUL ENERGY DEMAND IN TRANSPORT

- How good is your transport model? Is it good enough?
- First step is calibration.
- Projections. OK perfect. Later
- In our model we have all mode of transport and the most recent technology develop vehicles (HEV, PHEV, EV, E-85 etc., ethanol, biodiesel)
- Questions for all of you? What is the biggest problem for WB6 countries in transport sector?
- How many cars you have?
- How often the cars are used?
- The urban busses are used only in the cities or...



MODELLING OF USEFUL ENERGY DEMAND IN TRANSPORT

Long distance

Short distance

Urban

Intercity

Other

Transport

Light duty vehicles

Buses

Two vehicles

Rail passenger

Heavy good

vehicles

Light commercial vehicles

Rail freight

Aviation





THANKYOU!



DEDINEC@MANU.EDU.MK

