

SOCIO-ECONOMIC IMPACTS OF RENEWABLE ENERGY

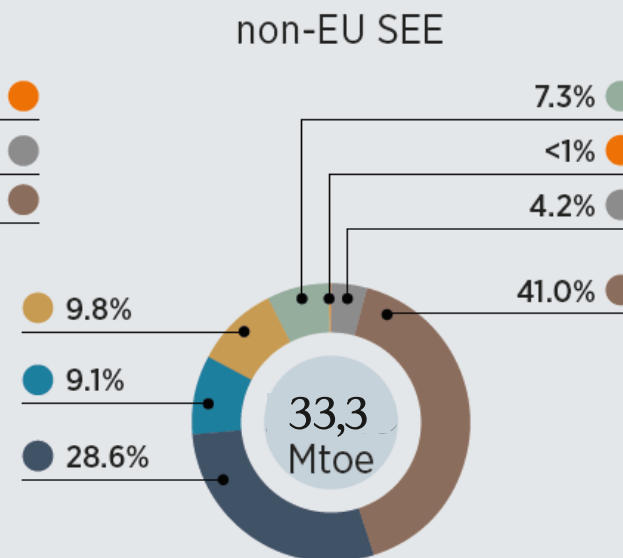
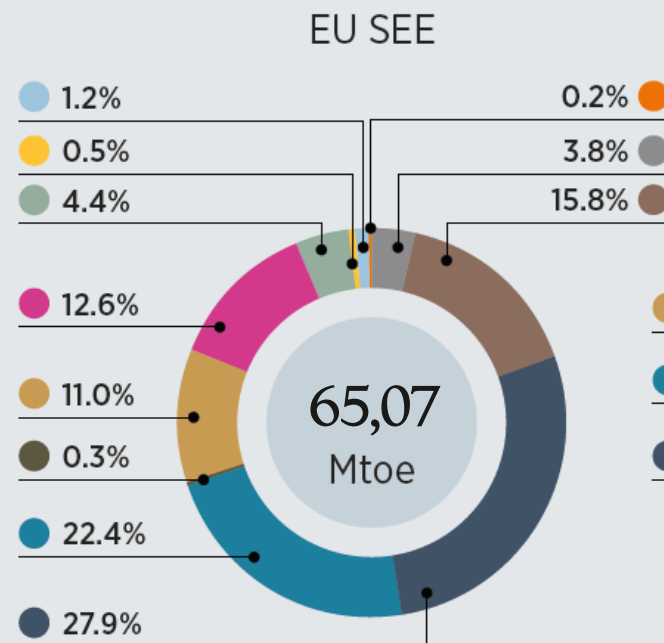
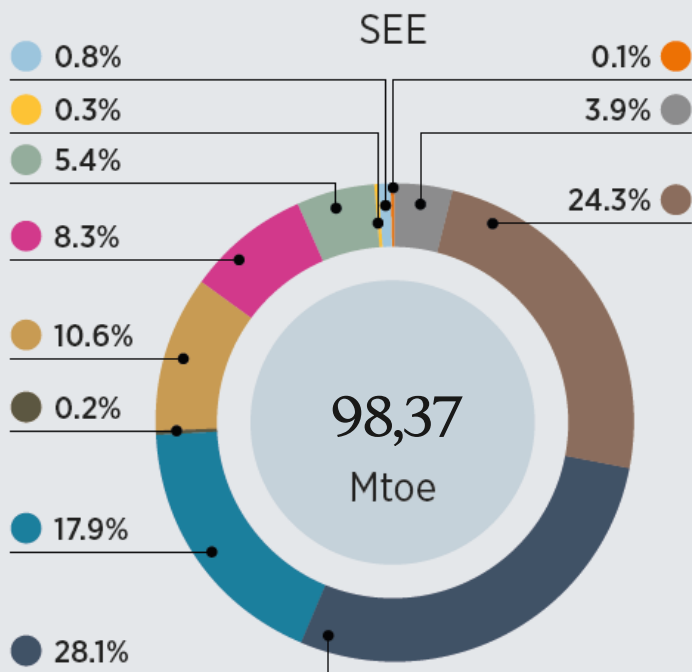
Preview from: “Renewable
Energy Market Analysis:
Southeast Europe”



The energy sector reliance on fossil fuels

Total primary energy supply, 2016

Regional shares, 2016 (Mtoe)

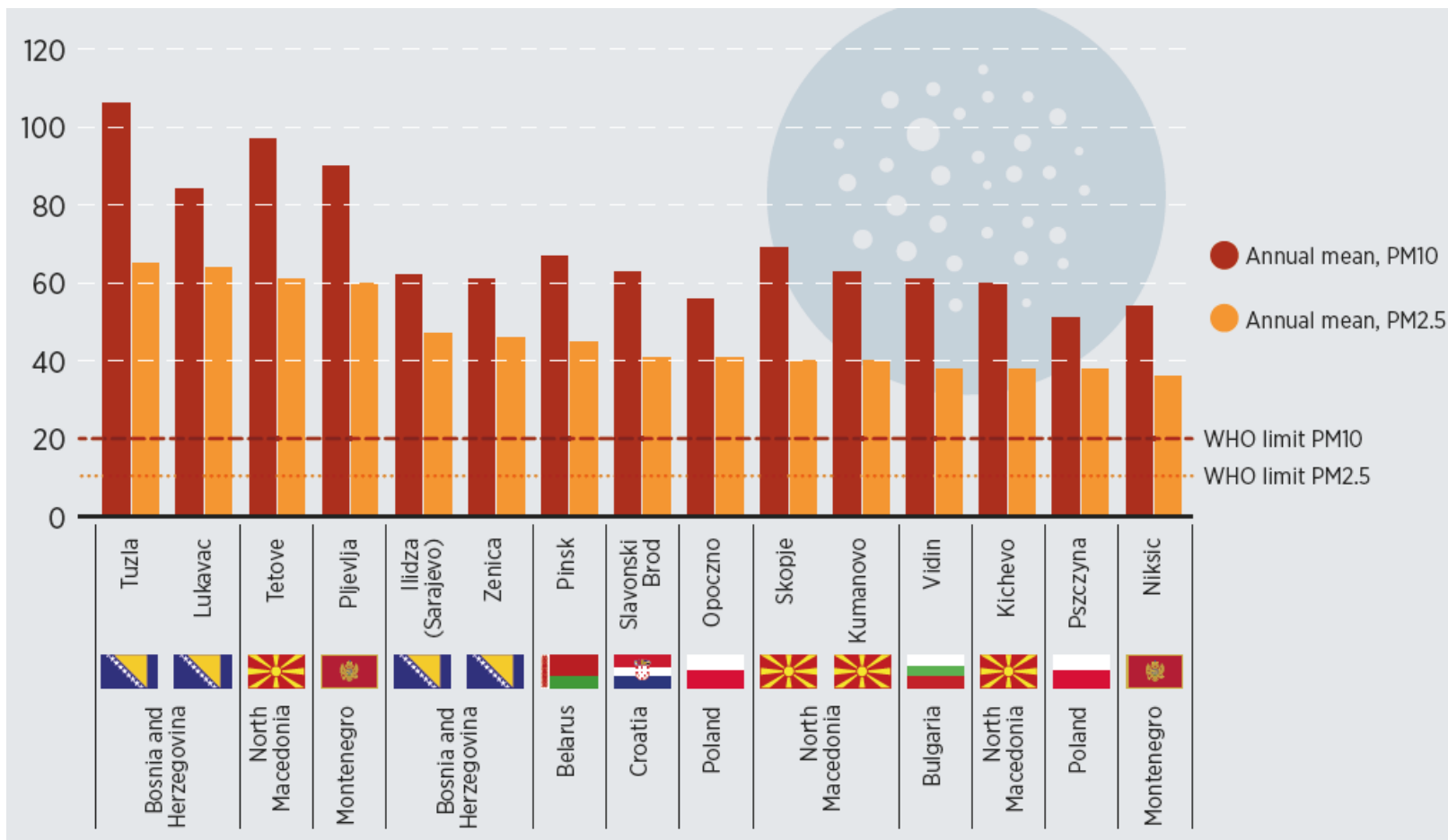


- Geothermal
- Wind
- Solar photovoltaic
- Hydro
- Nuclear heat
- Biomass
- Non-renewable waste
- Natural gas
- Oil and petroleum products
- Lignite
- Solid fossil fuels



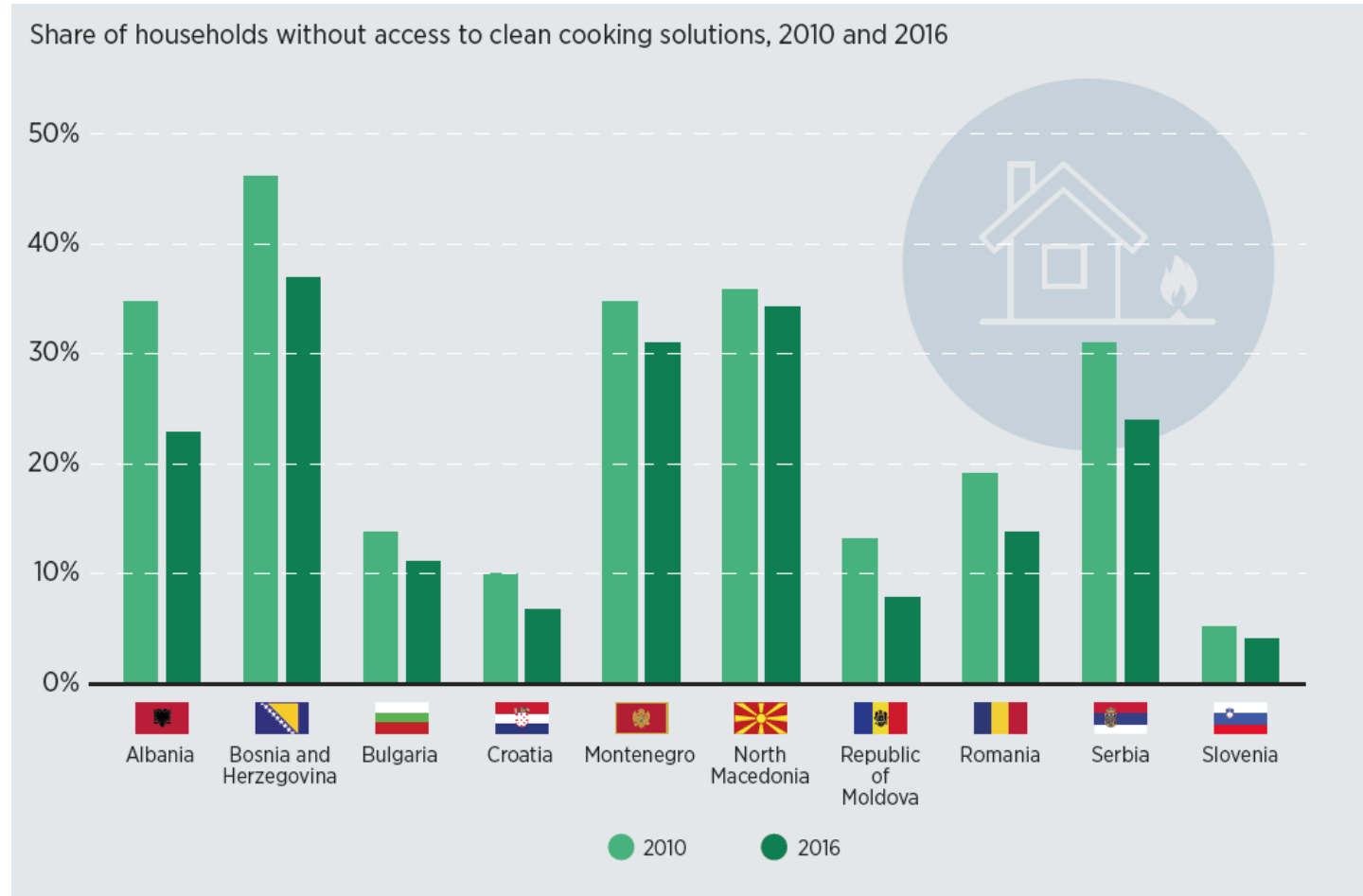
Air pollution

Top 15 European cities per air pollution [particulate matter $\mu\text{g}/\text{m}^3$ - annual mean]



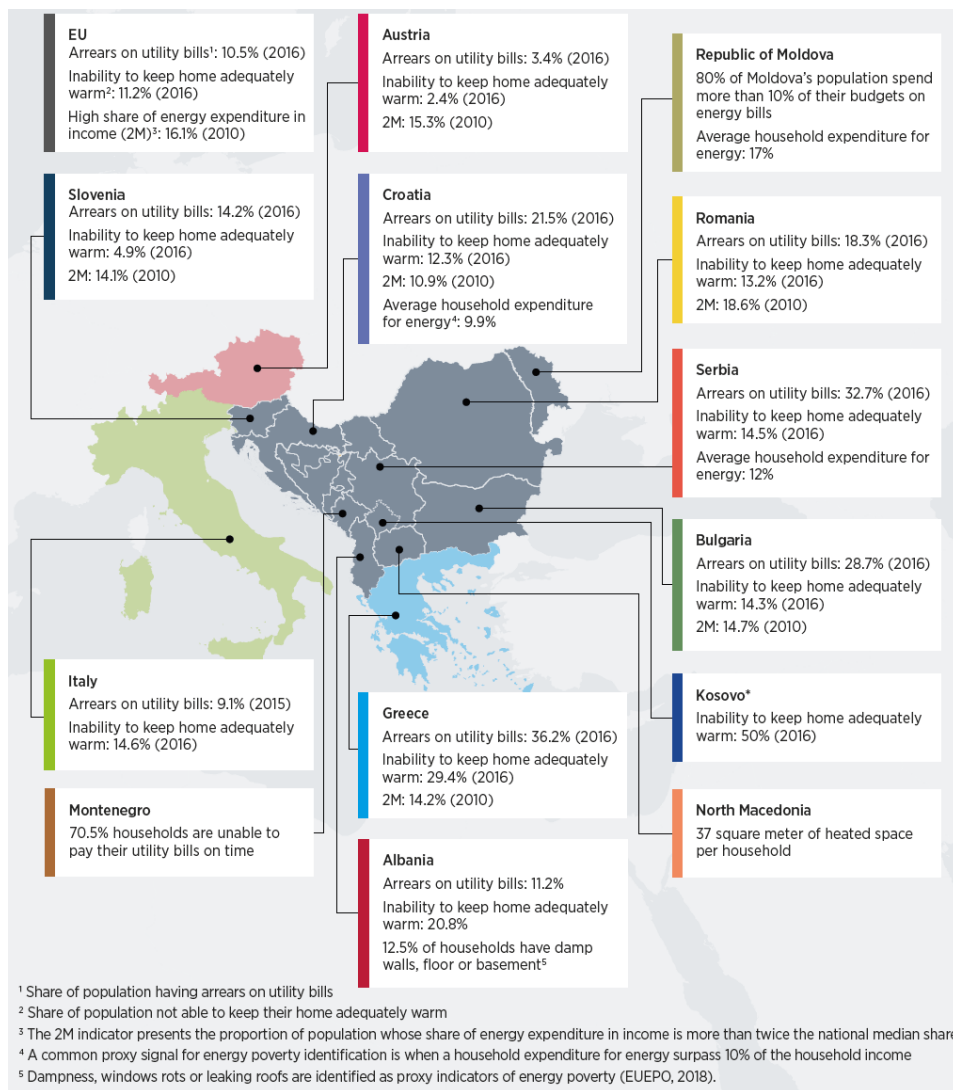


Share of households without access to clean cooking solution 2010-2016





Energy Poverty

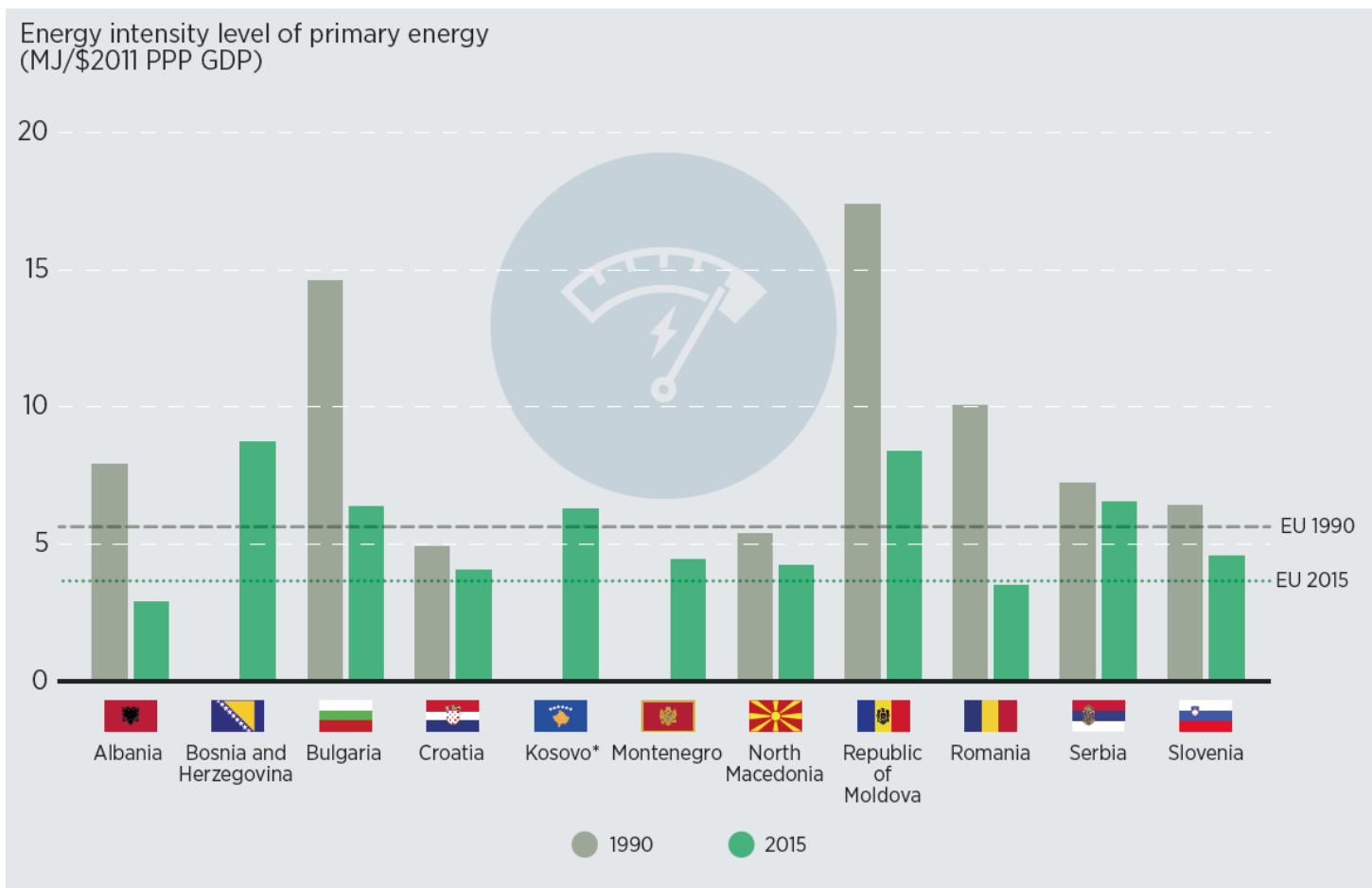


Energy poverty in SEE

- Arrears on utility bills ranging from 14,2% to more than 70% of the population, depending on jurisdiction.
 - 10% in EU, 3,4% in Austria
- Inability to keep the whole house adequately warm
- High energy expenditure shares on total expenditure
- Large use of traditional biomass

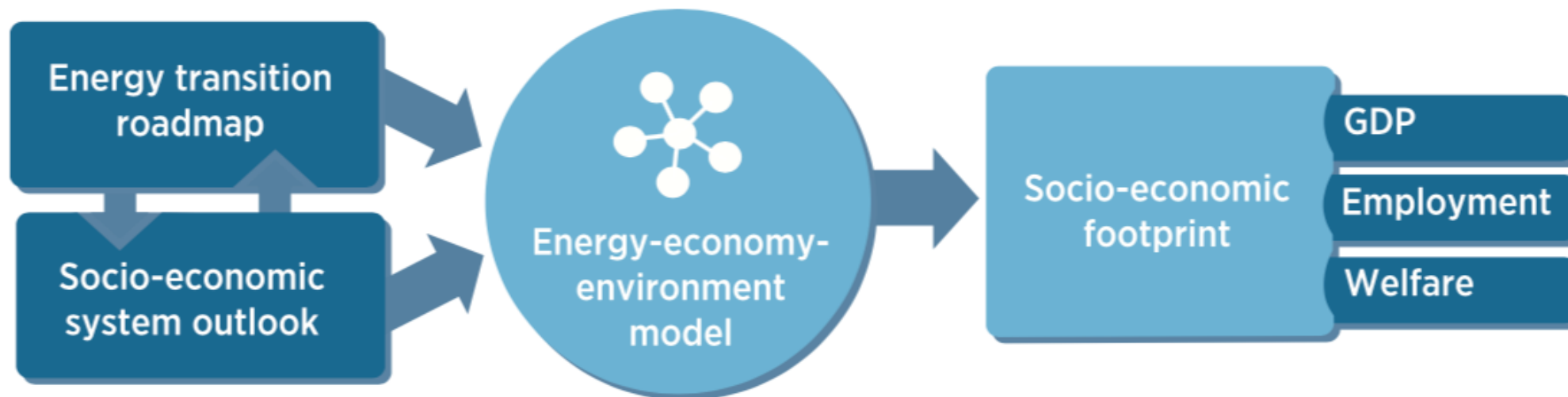


Energy intensity levels, SEE, 1990-2015 [MJ/USD PPP GDP]





The energy transition and the socio-economic system

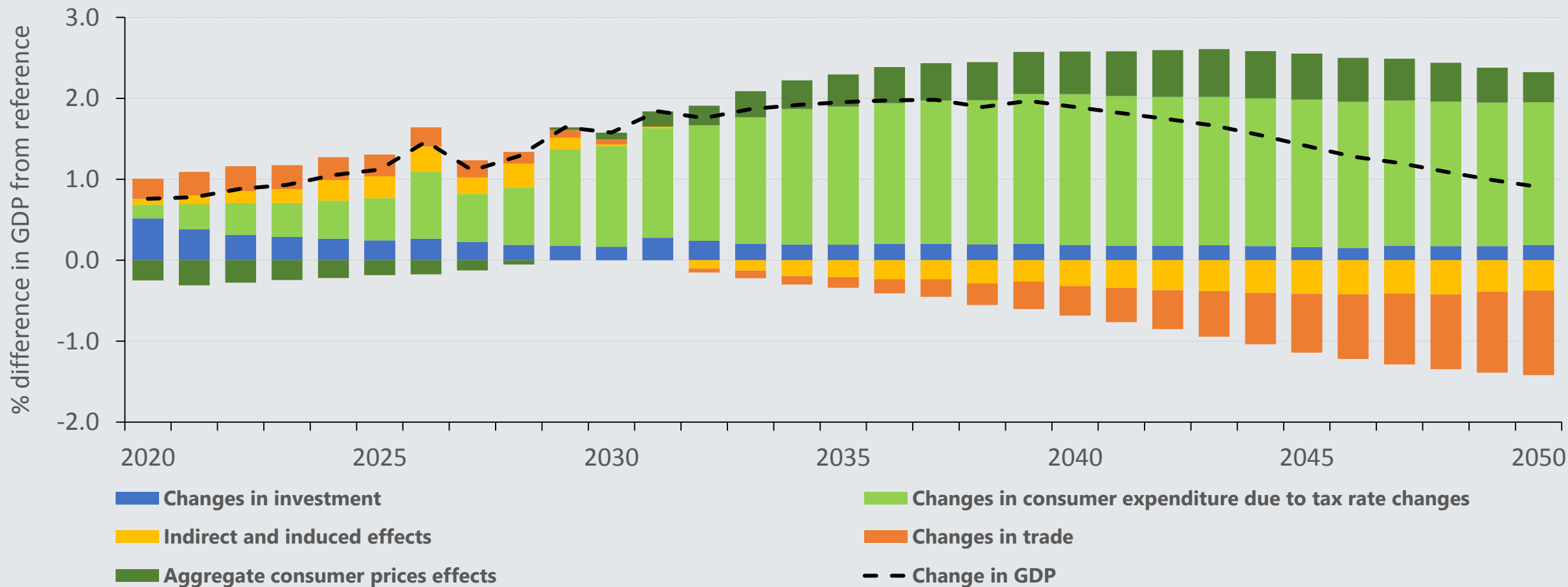


A complete transition includes both the energy transition and the socio-economic system transition, and their interlinkages.



Socio-economic impact: GDP

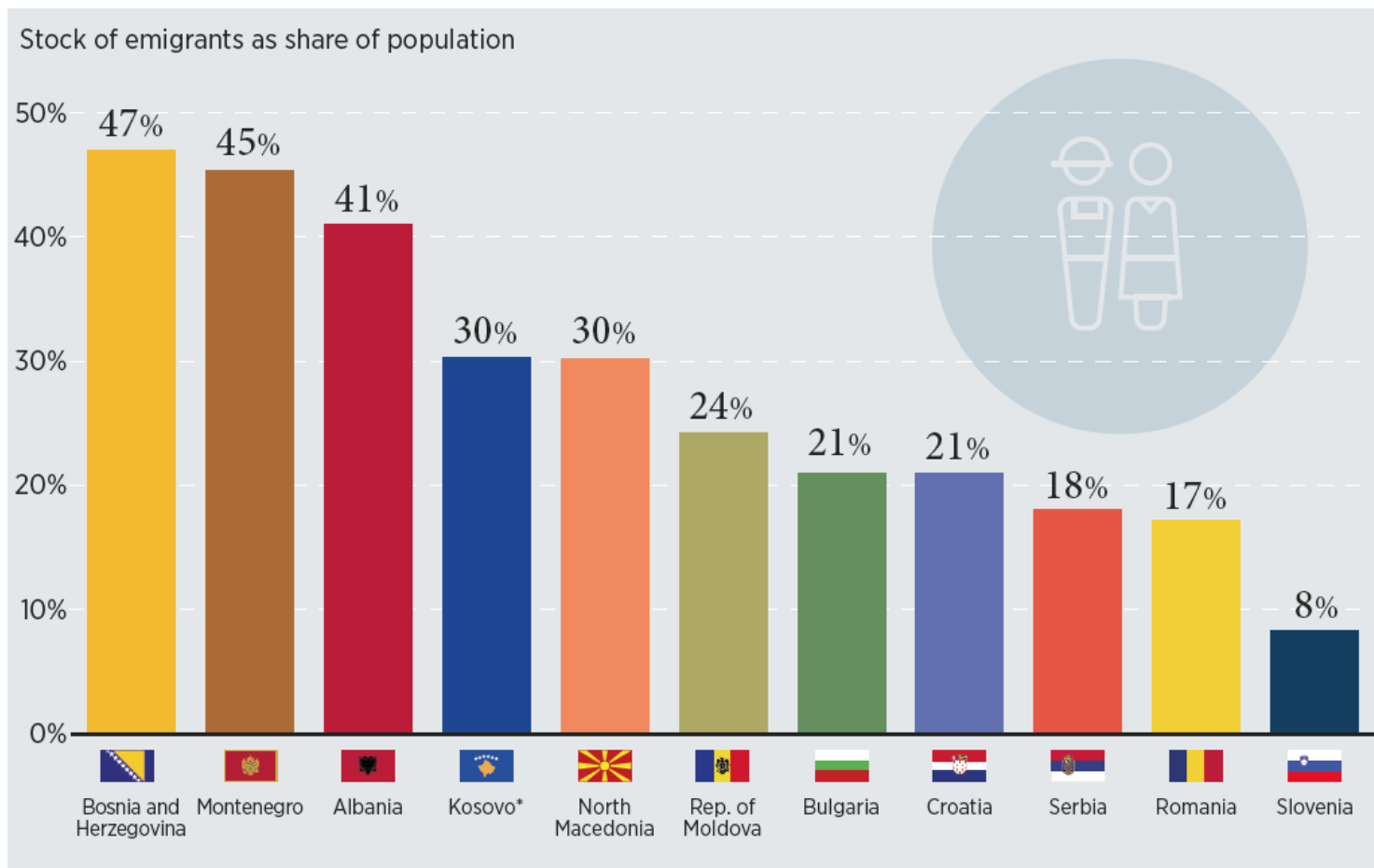
Difference in GDP from Reference case [%]





Brain drain

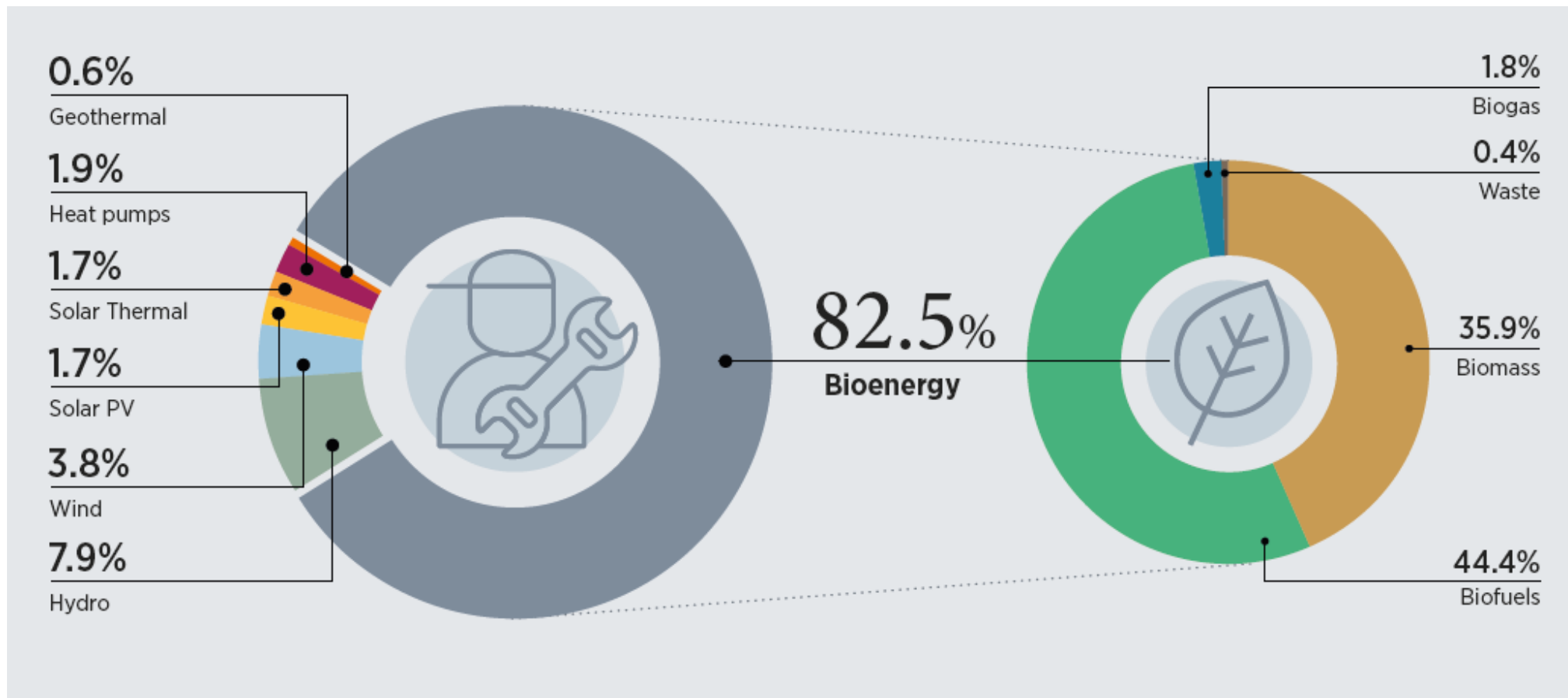
Stock of emigrants as a share of population





Renewable energy employment

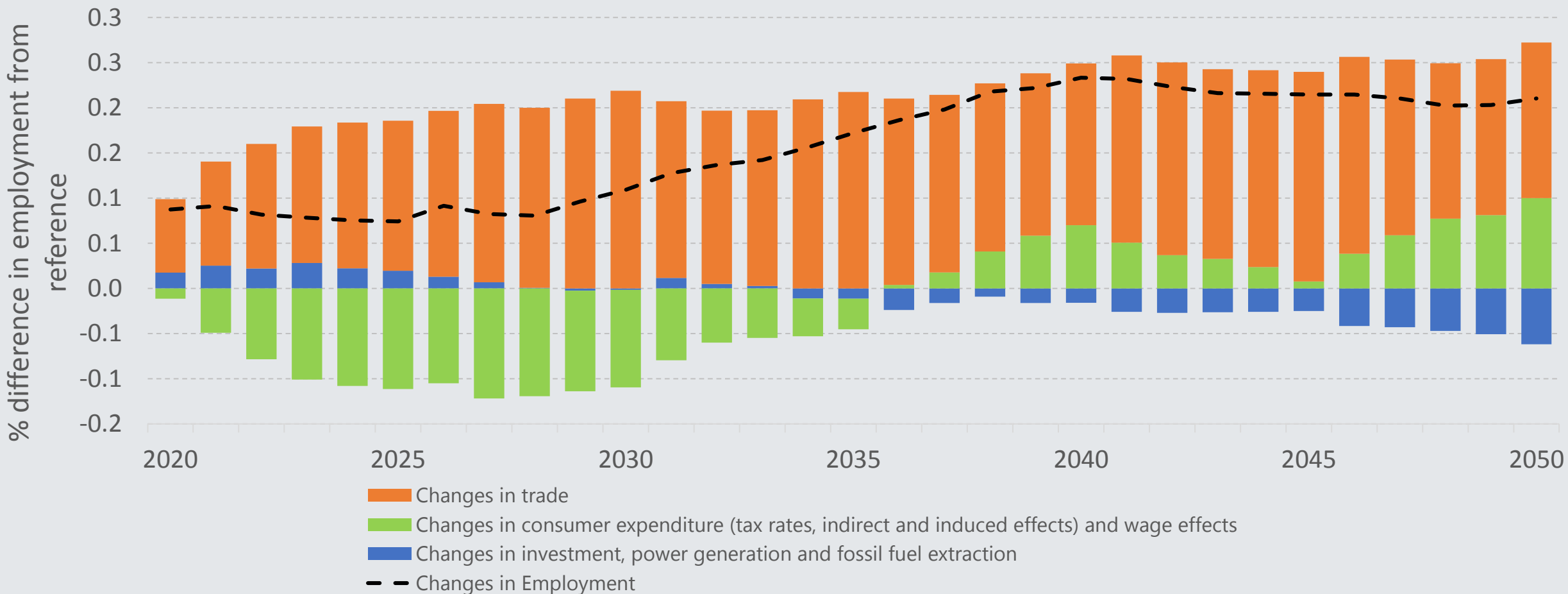
Share of direct and indirect jobs in the RES sector, EU-SEE, 2017





Socio-economic impact: Jobs

Difference in employment from Reference Case [%]





Thank you for your attention