



Renewable Energy Services in Education and Training

Component
within project:
Decarbonisation
of the Electricity Sector
in the Western Balkans

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Initiative of
South
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Edu-Energy Conference: Building Bridges for Sustainable Energy Learning



Energy production and
consumption in the Western
Balkans: Over the hills and far
away

Aleksandar Macura

15 March 2024

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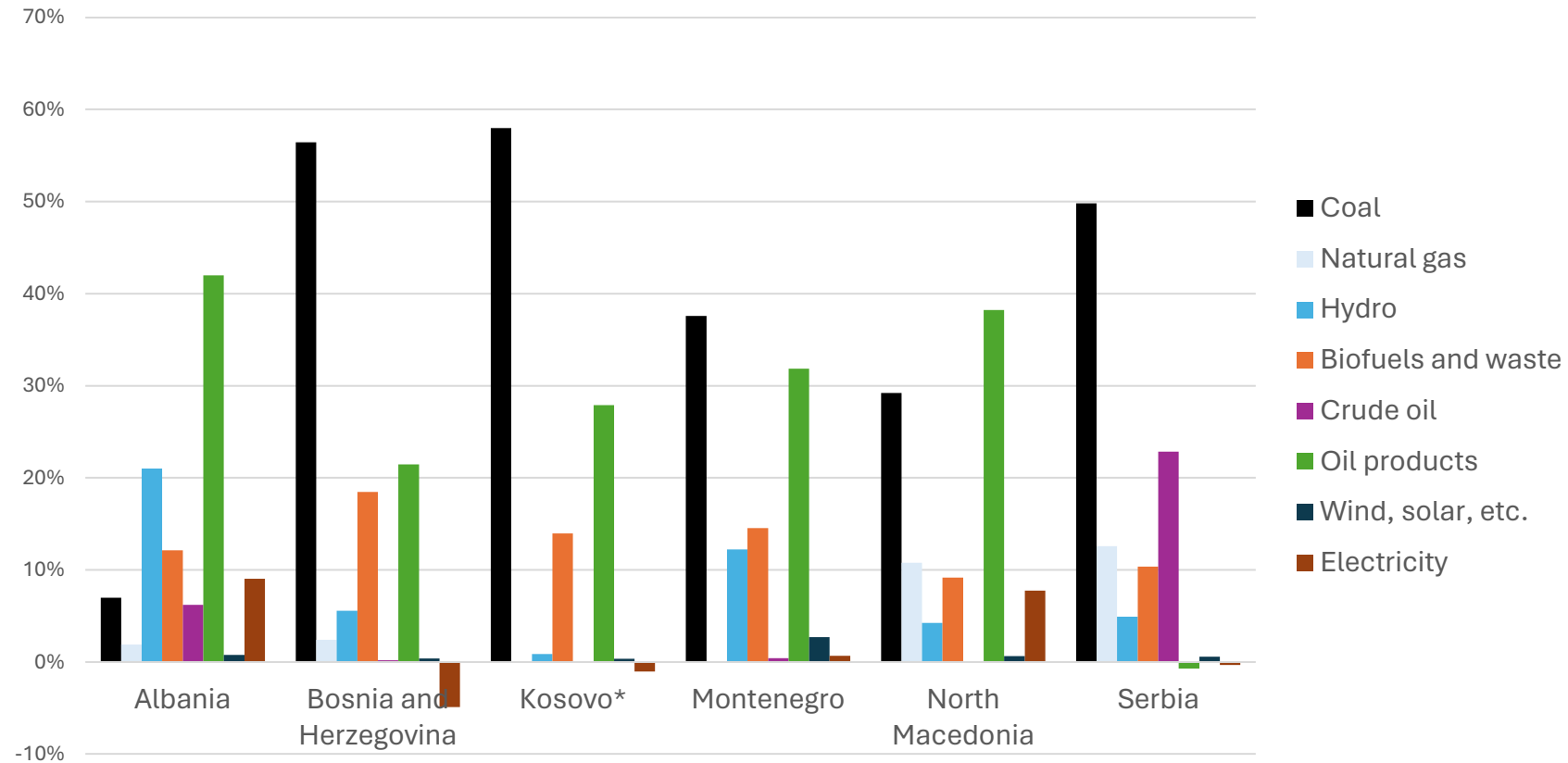
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Where has all this energy came from?



Total energy supply in Energy community parties from the WB by source (%), 2020



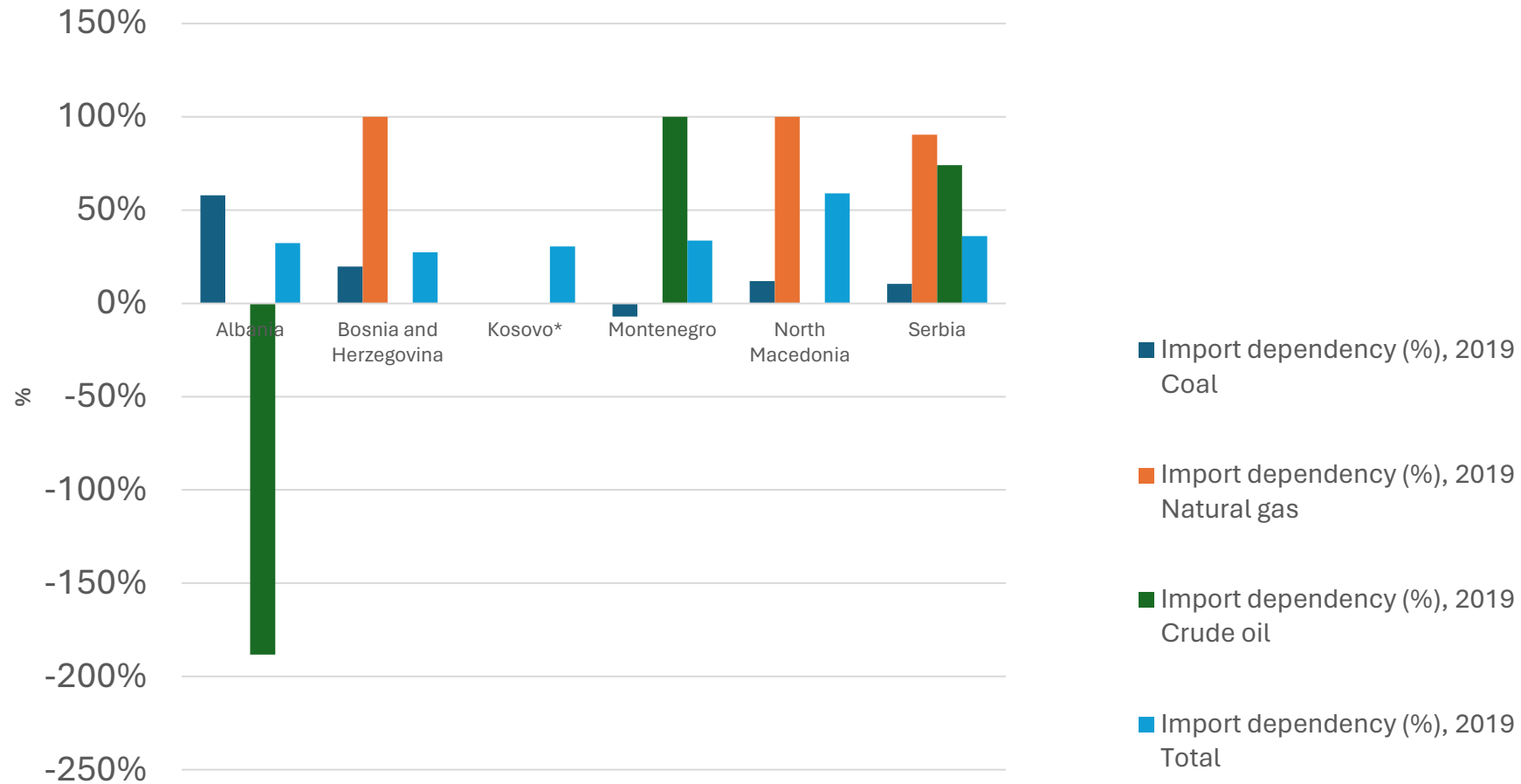
Where, oh where, has this energy came from?



But where has all this energy come from?



Import dependency rate in the WB by fuel in 2019



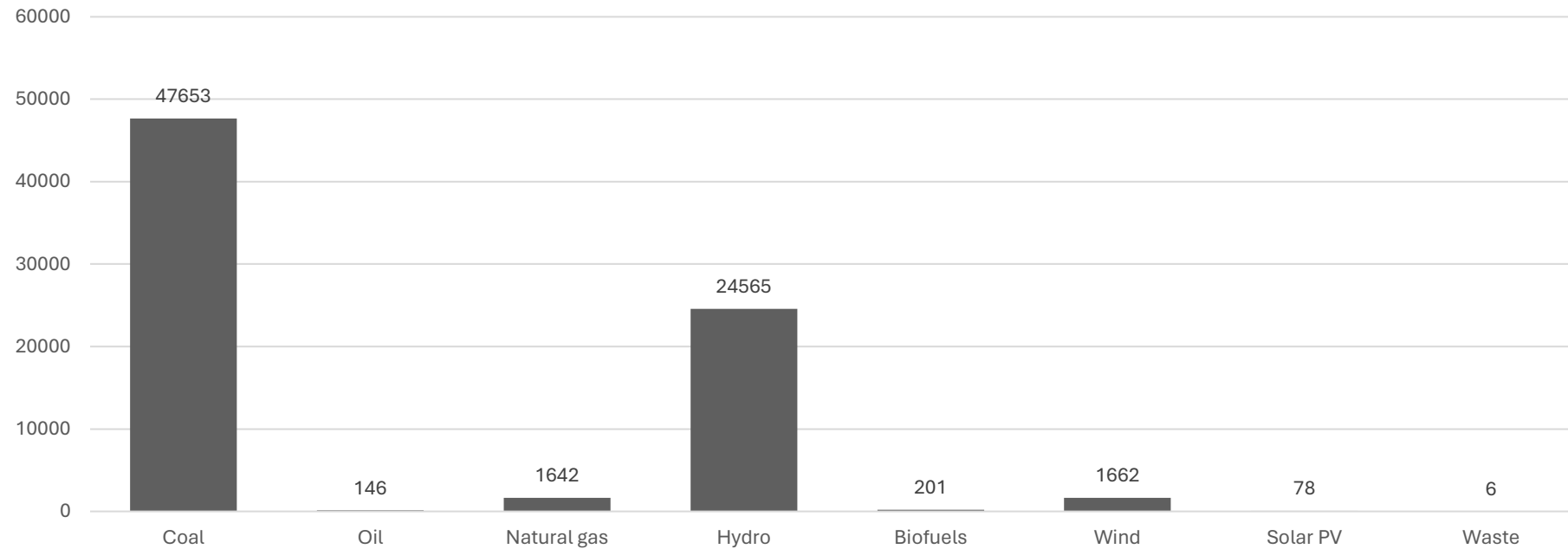
Where is all this coal going?



Where, oh where is this coal going?



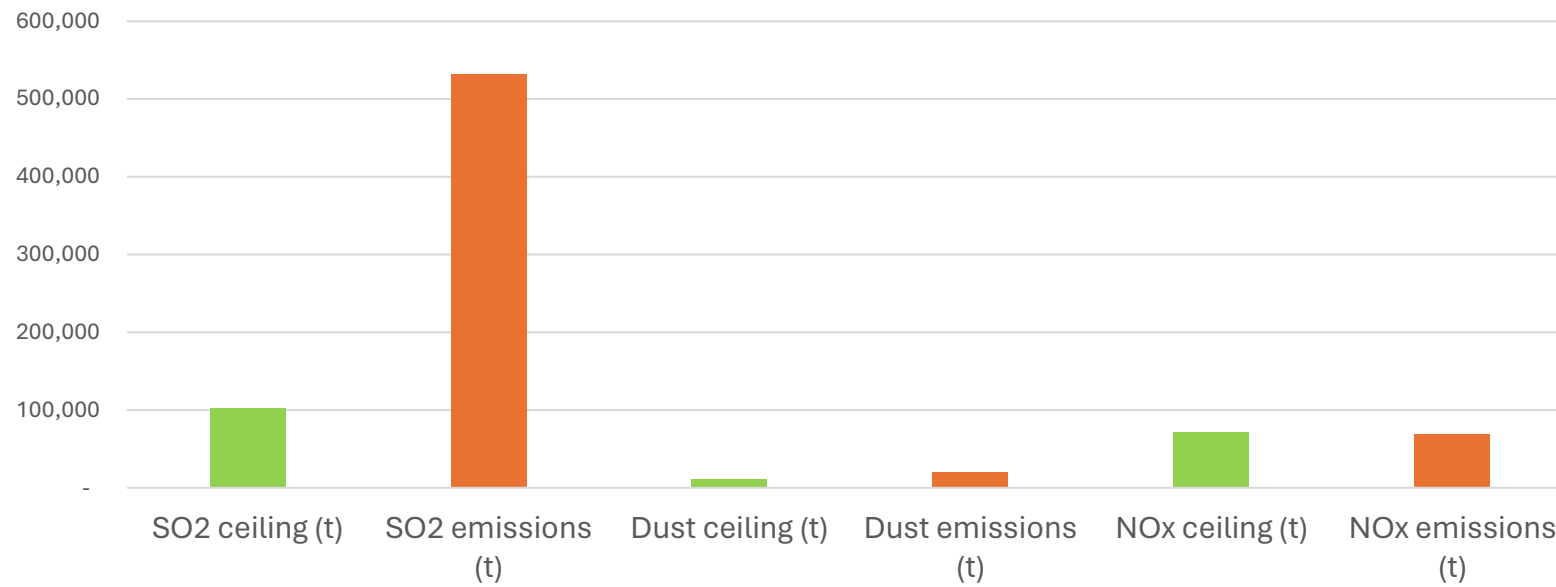
Electricity production in the Western Balkans by source in 2019 (GWh)



You know by now: But where is all this coal going?



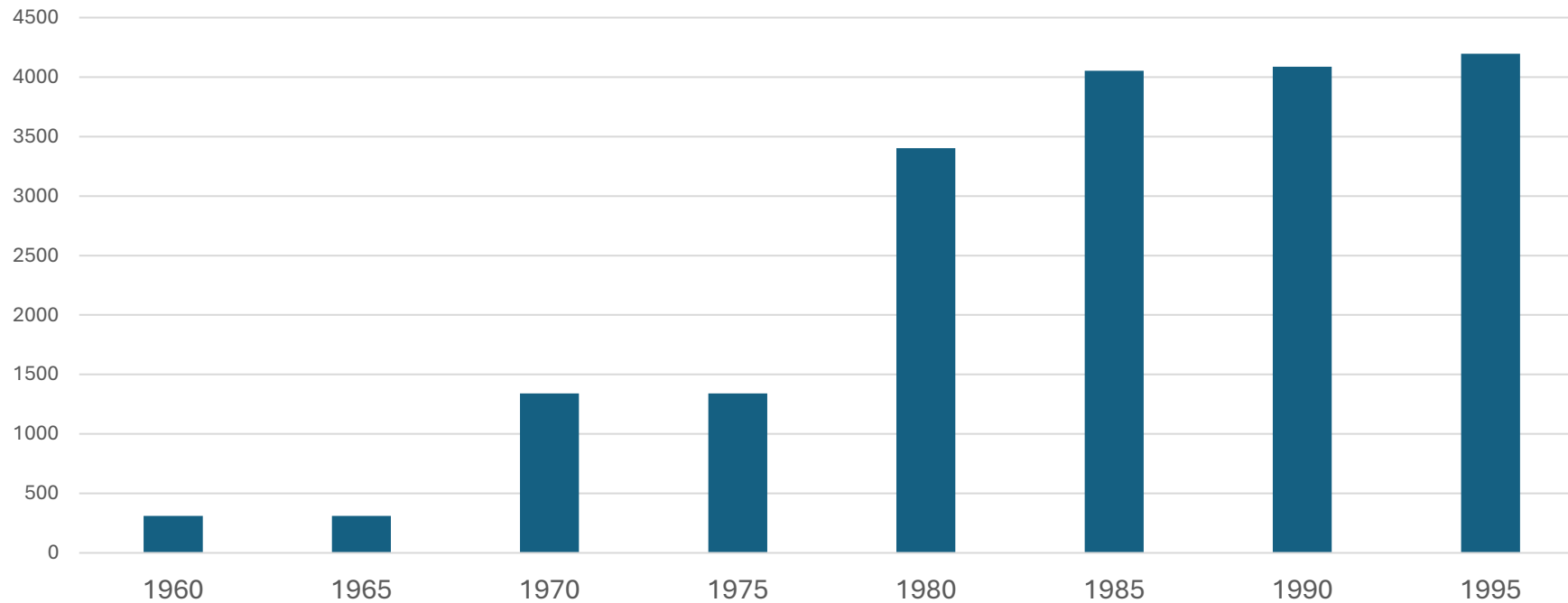
Ceilings and actual emissions (t) of plants covered by NERPs
in the Western Balkans in 2021



We did it. We knew how to do it. We liked it.



Serbian lignite power transformation. Total capacity of Serbian lignite plants (MW)



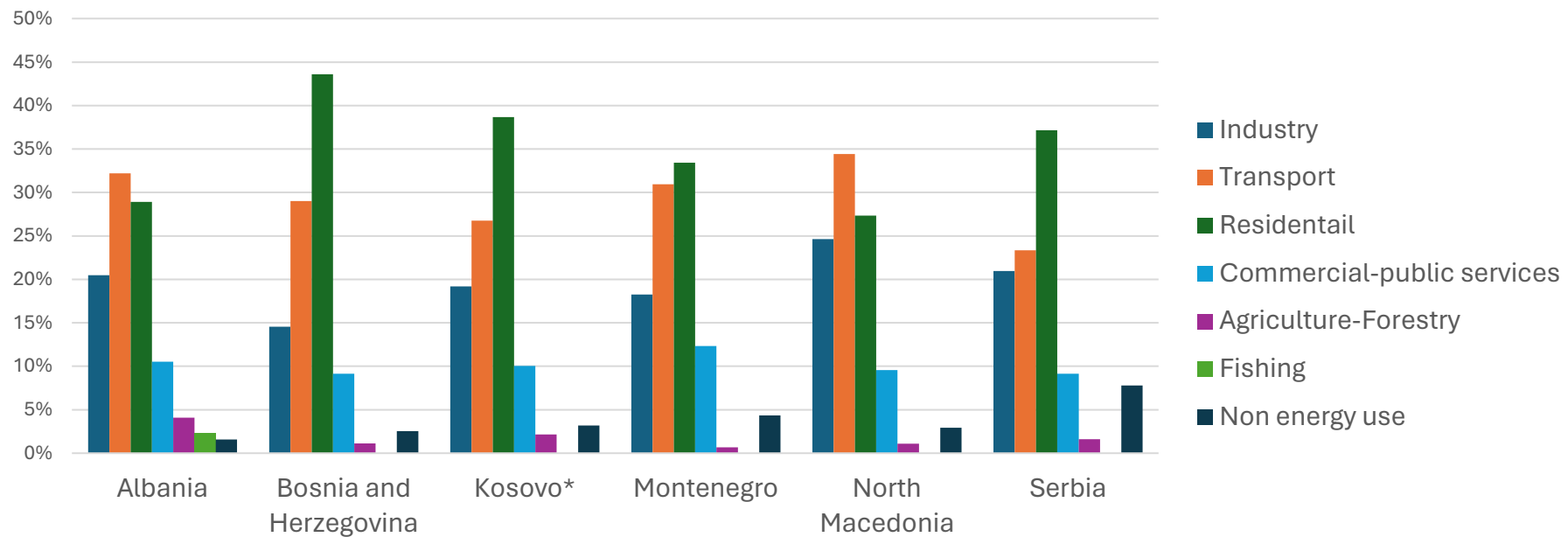
We sure liked it



Where has all this energy gone?



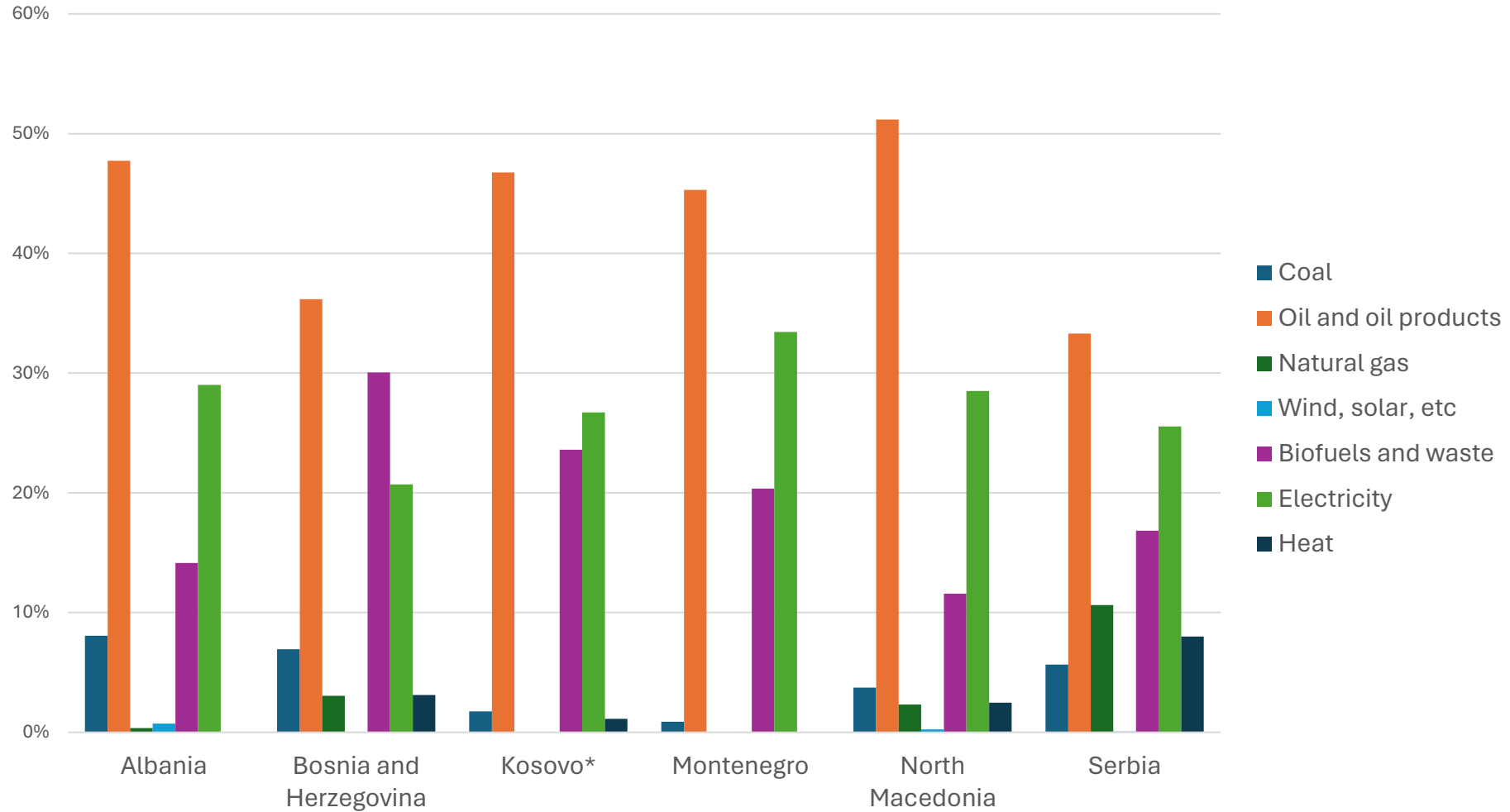
Total final energy consumption by sector in the WB in 2020 (%)



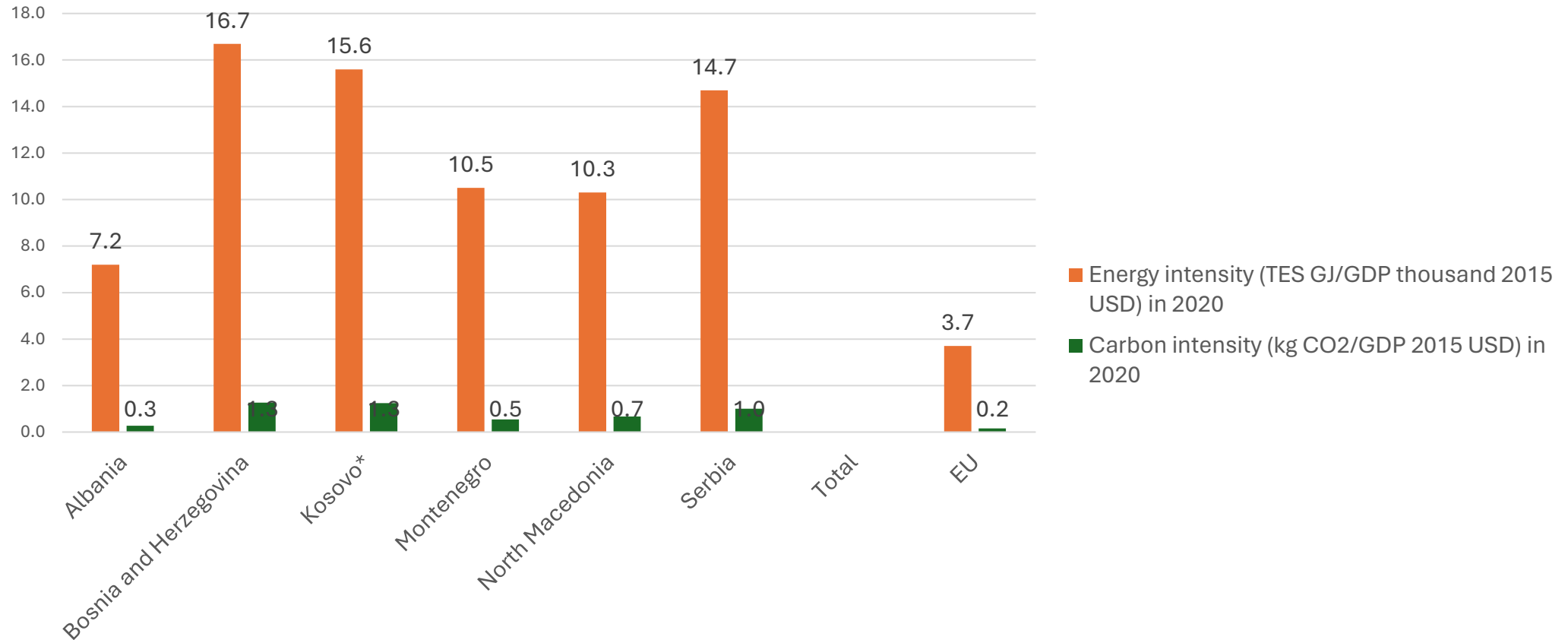
Where, oh where, has this energy gone?



Total final energy consumption in the WB by fuel in 2020(%)



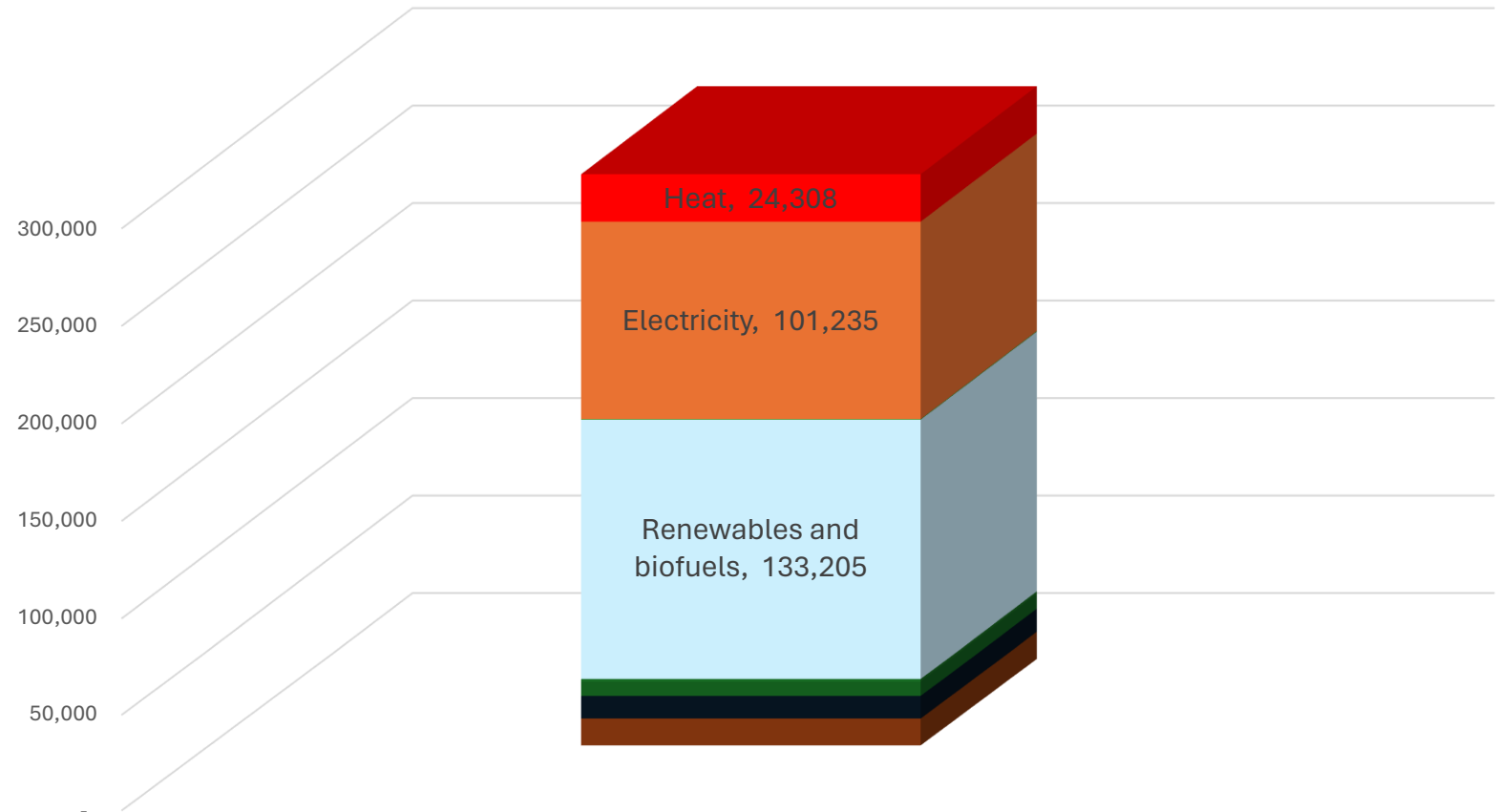
But where has all this energy (and carbon) gone?



Ok. Let's go home.



Final energy consumption
(TJ) in households per
fuel type/energy carrier in
2020 in the WB



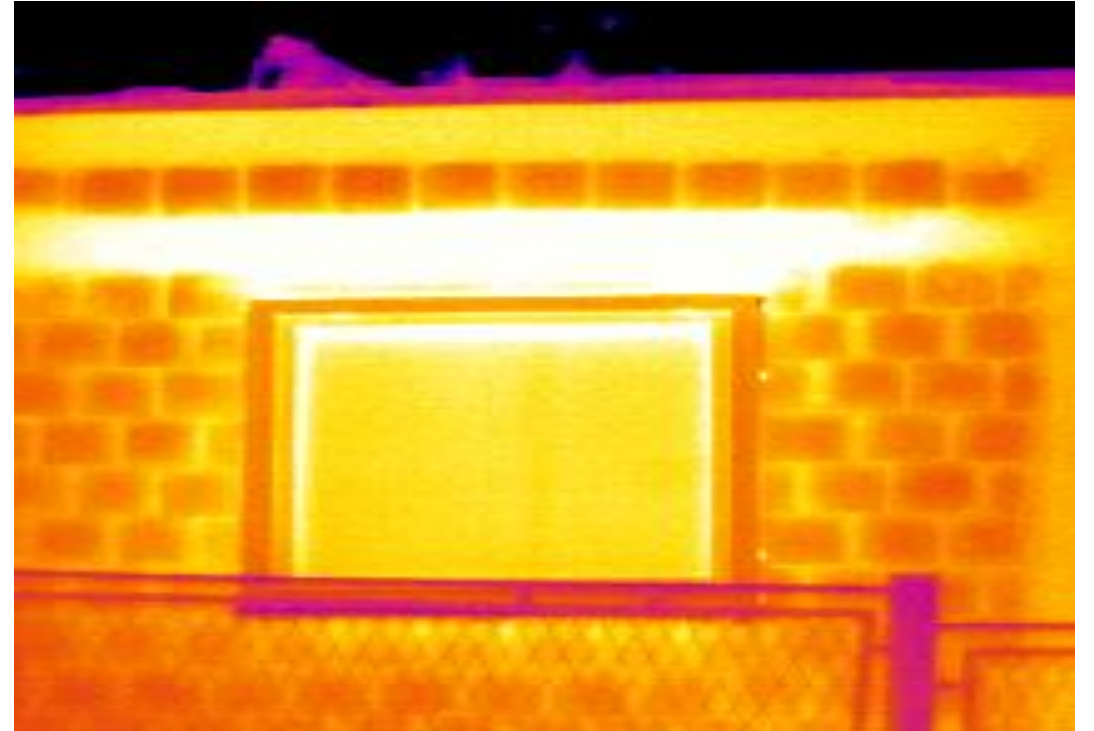
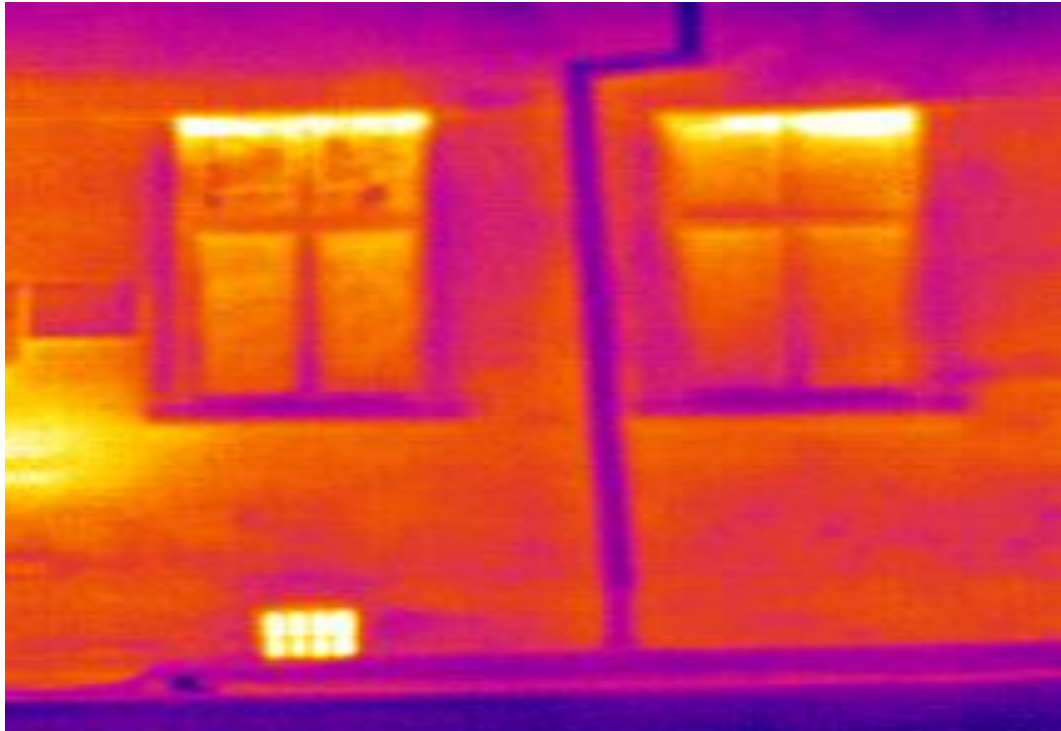
I am going home.

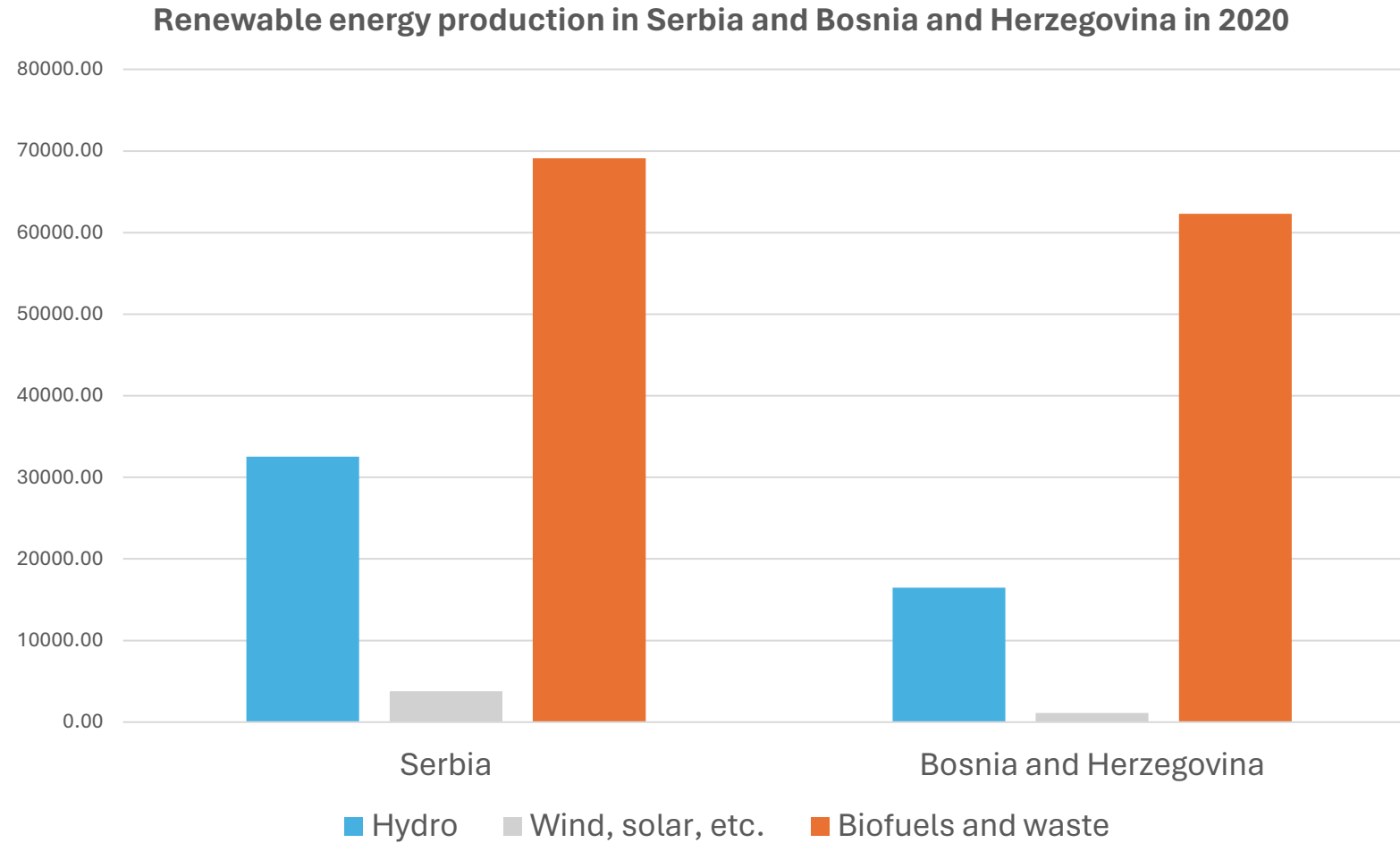


Invisible millions

- Stoves, ovens, masonry stoves are the most widespread devices used for heating
- Almost three million households rely on the heat produced in such devices
- Real-life efficiency of these devices is estimated to be in the range from 30-40%
- Seasonal efficiency of 65% is minimal type test efficiency required for eco-design certified appliances while the benchmark value set by the EU law is 86%
- The EU law in question is still not envisaged for the transposition in the WB countries (Delegated Regulation (EU) 2015/1186 and Commission Regulation (EU) 2015/1188)

...warm home...







Bioenergy in BOSNIA AND HERZEGOVINA in 2020

biofuels and waste account for **28%**
of total domestic **energy production**
(second largest after coal)

primary solid biofuels account
for **64%** of all residential **energy**
consumption

biofuels and renewable waste account for **0%** of domestic
electricity supply

biofuels and renewable waste
accounted for **21%** of all (district)
heat supplied (second largest
share following natural gas)



Bioenergy in SERBIA in 2020

biofuels and waste account for **15%** of total domestic **energy production** (third largest)

primary solid biofuels account for **39%** of all residential **energy consumption** (single largest share)

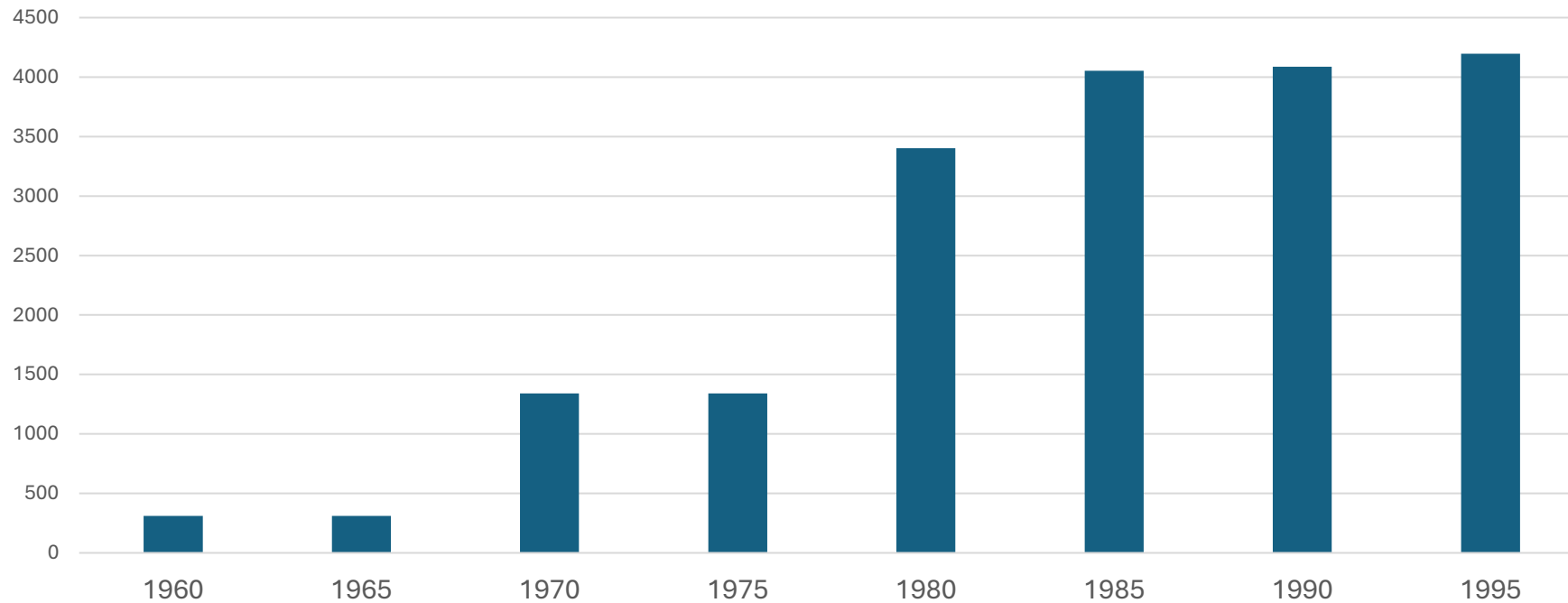
biofuels and renewable waste accounted for **1%** of domestic **electricity supply**

biofuels and renewable waste accounted for **1%** of all (district) **heat** supplied

We did it. We knew how to do it. Let us do something else now. It is time.



Serbian lignite power transformation. Total capacity of Serbian lignite plants (MW)



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Thank you!

Aleksandar Macura

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