













> Romania on track for 2030?

"Perspectives for renewables in Romania and the CESEC region"
EUFORES Workshop

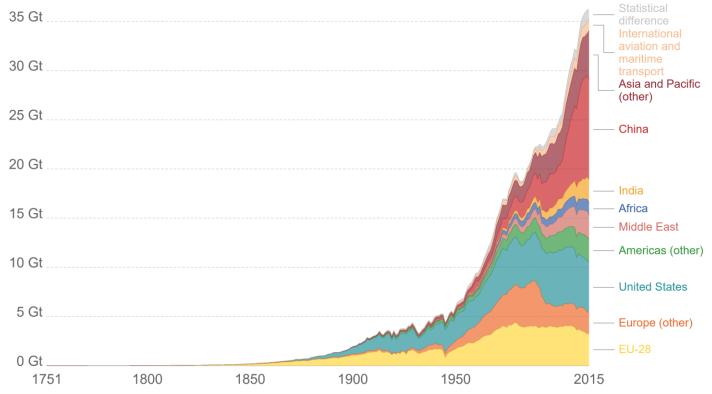
01st April 2019

Martin MOISE

Annual CO2 emissions by world region



Annual carbon dioxide (CO₂) emissions measured in billion tonnes (Gt) per year



Source: Carbon Dioxide Information Analysis Center (CDIAC)

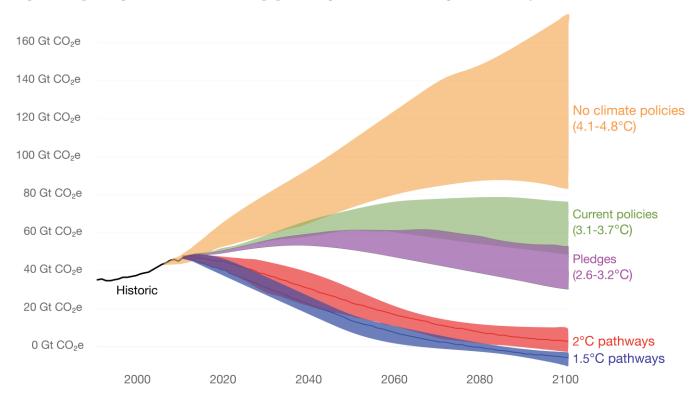
CC BY

Note: Emissions data have been converted from units of carbon to carbon dioxide (CO2) using a conversion factor of 3.67. Regions denoted "other" are given as regional totals minus emissions from the EU-28, USA, China and India. Here, we have rephrased the general term "bunker (fuels)" as "international aviation and maritime transport" for clarity.

Global greenhouse gas emissions scenarios

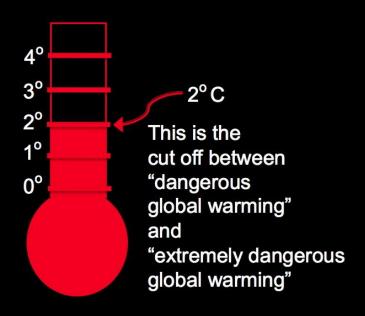


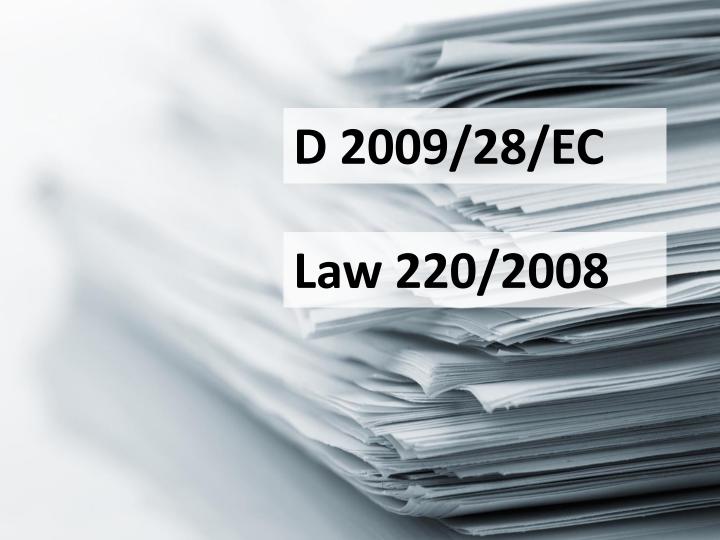
Potential future emissions pathways of global greenhouse gas emissions (measured in gigatonnes of carbon dioxide equivalents) in the case of no climate policies, current implemented policies, national pledges within the Paris Agreement, and 2°C and 1.5°C consistent pathways. High, median and low pathways represent ranges for a given scenario. Temperature figures represent the estimated average global temperature increase from pre-industrial, by 2100.



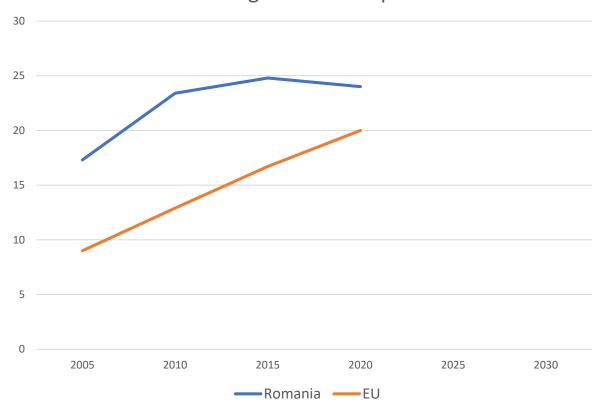


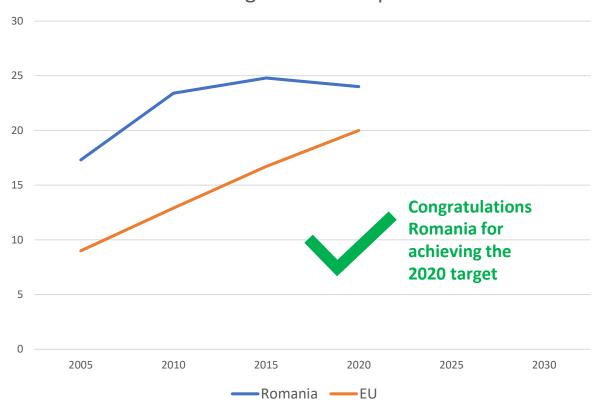
well below 2 degrees

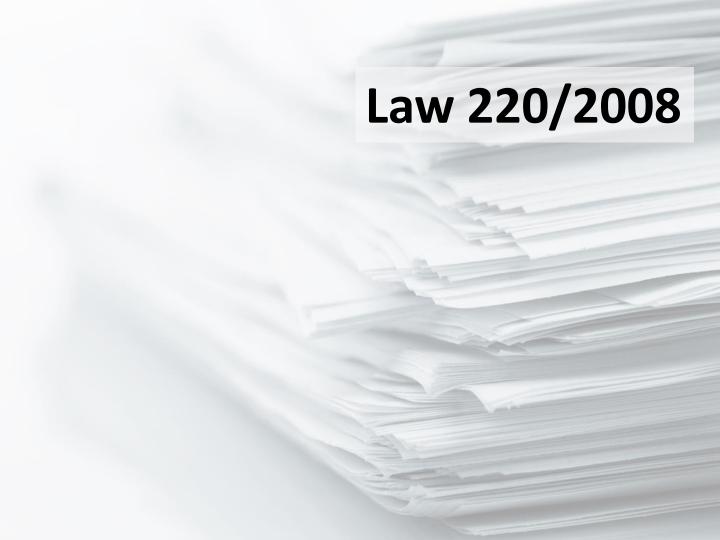








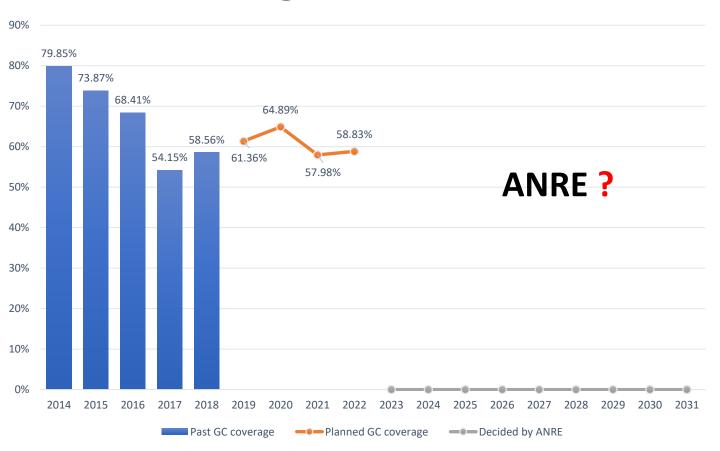




Law 220/2008



GC Coverage 2014 - 2031



D 2009/28/EC

Law 220/2008

D 2018/2001 EU

Max. potential RES in RO

| Power plant technology | Today [MW] | Until 2030 [MW] | Until 2050 [MW] |
|------------------------|------------|-----------------|-----------------|
| Wind onshore | 3156 | +10606 | +12084 |
| Wind offshore | 0 | +3115 | +3500 |
| Solar ground-mounted | 1375 | +15971 | +19476 |
| Solar rooftop | | +31593 | +35481 |
| Hydro - lakes | 6761 | +709 | +798 |
| Hydro - river | | +3071 | +3195 |
| Hydro - pumping | | +1361 | +1361 |
| Geothermal | 0.05 | +41 | +63 |
| | | | |
| Total | 11292 | +66467 | +75958 |

Summary Findings of Lazard's 2017 Levelized Cost of Energy Analysis⁽¹⁾

Selected Historical Mean LCOE Values(2)



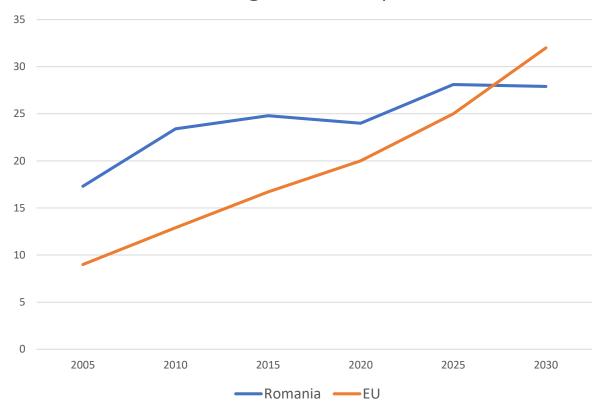
Source: Lazard estimates.

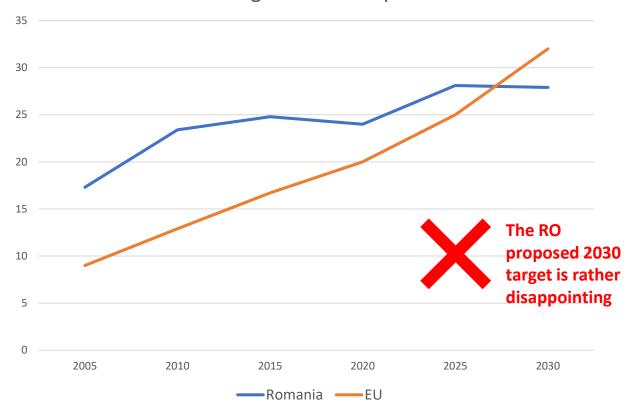
Note: Reflects average of unsubsidized high and low LCOE range for given version of LCOE study.

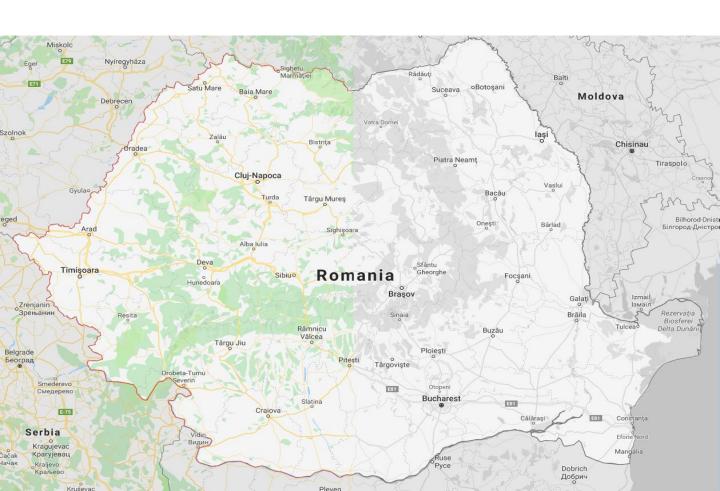
(1) Primarily relates to North American alternative energy landscape, but reflects broader/global cost declines.

(2) Reflects total decrease in mean LCOE since the later of Lazard's LCOE—Version 3.0 or the first year Lazard has tracked the relevant technology.

(3) Reflects mean of fixed-tilt (high end) and single-axis tracking (low end) crystalline PV installations.

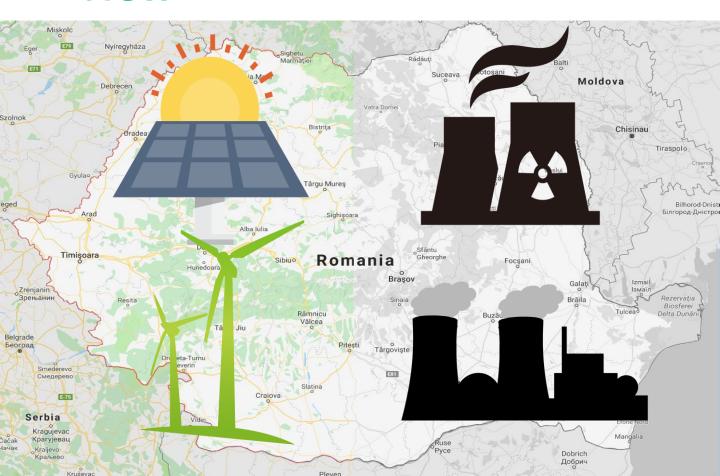






New

Old



New Old

- ✓ High RES quota
- ✓ Close down coal facilities
- ✓ Long term PPA's
- ✓ CfD for low carbon technologies – especially RES
- Prosumers and distributed generation
- ✓ Batteries and demand side
- ✓ Liberalization of the energy market

- Low RES quota
- State aid for coal
- New coal power plants
- Standard electricity contracts
- New nuclear reactors
- Prosumers cap. 750 MW
- No batteries
- Re-regulation of the energy market

We all have to work together



to find the balanced solution!!















> Thank You!!

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