



Climate change trends and challenges

Marianna Bolshakova
UNEP

**Regional Workshop on Environment and Climate Change
Issues in the Implementation of UNSDCFs**
Issue-based Coalition on Environment and Climate Change
12-14 September 2023, Istanbul (Türkiye)



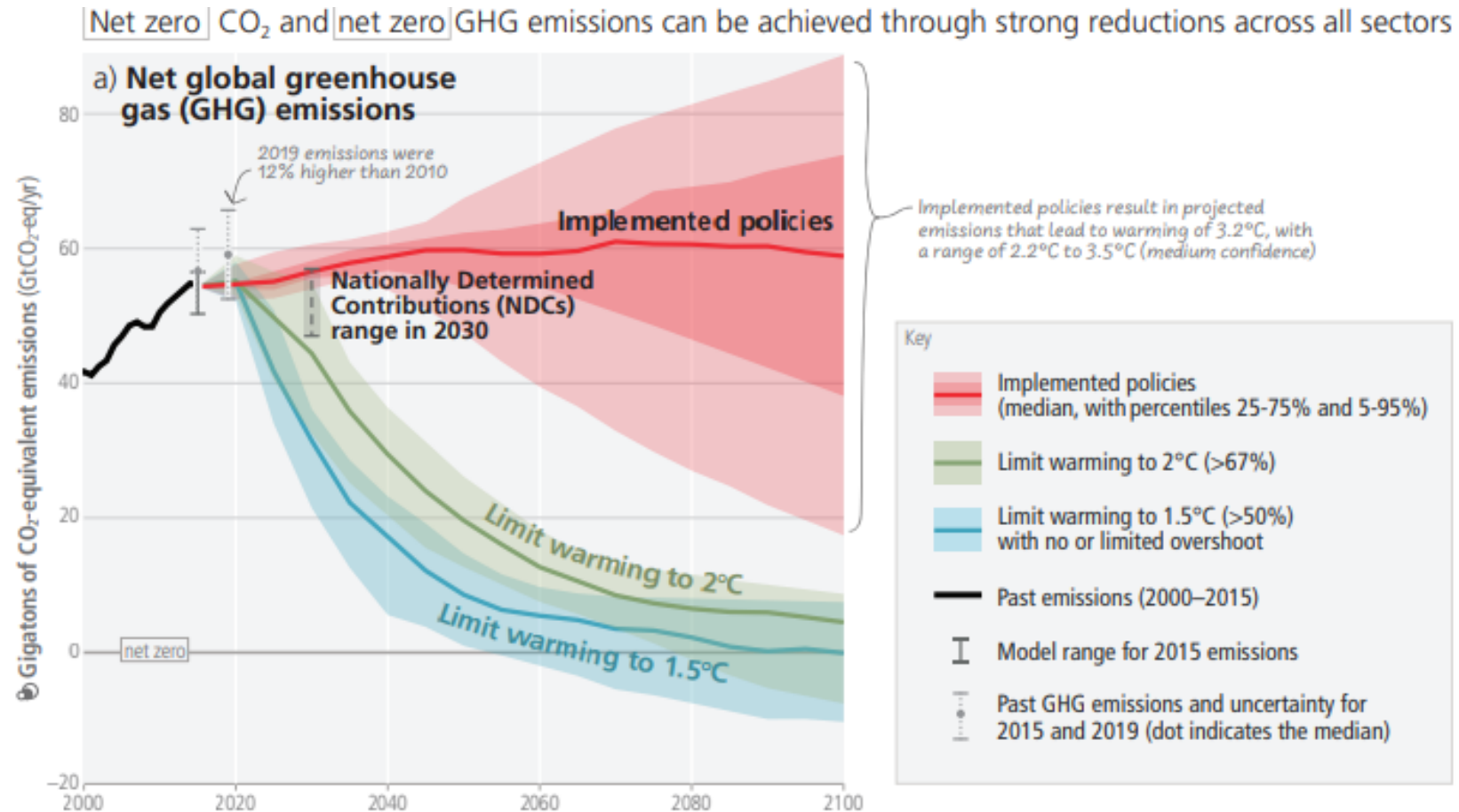
UNEP 2022 emissions gap report

The world is on a path towards a temperature rise far above the goal of well below 2°C, preferably 1.5°C.

- Unconditional NDCs will give a **66%** chance of limiting global warming to about **2.6°C** by 2100. With conditional NDCs, about **2.4°C**
- Policies currently in place (the actual trajectory of implementation and presuming they are implemented), without further strengthening, warming to over **2.8°C**
- Implementation of all NDCs + net-zero commitments made point to a **1.8°C increase**. However, this scenario is not credible, based on the discrepancy between current emissions, near-term NDC targets and long-term net-zero targets.

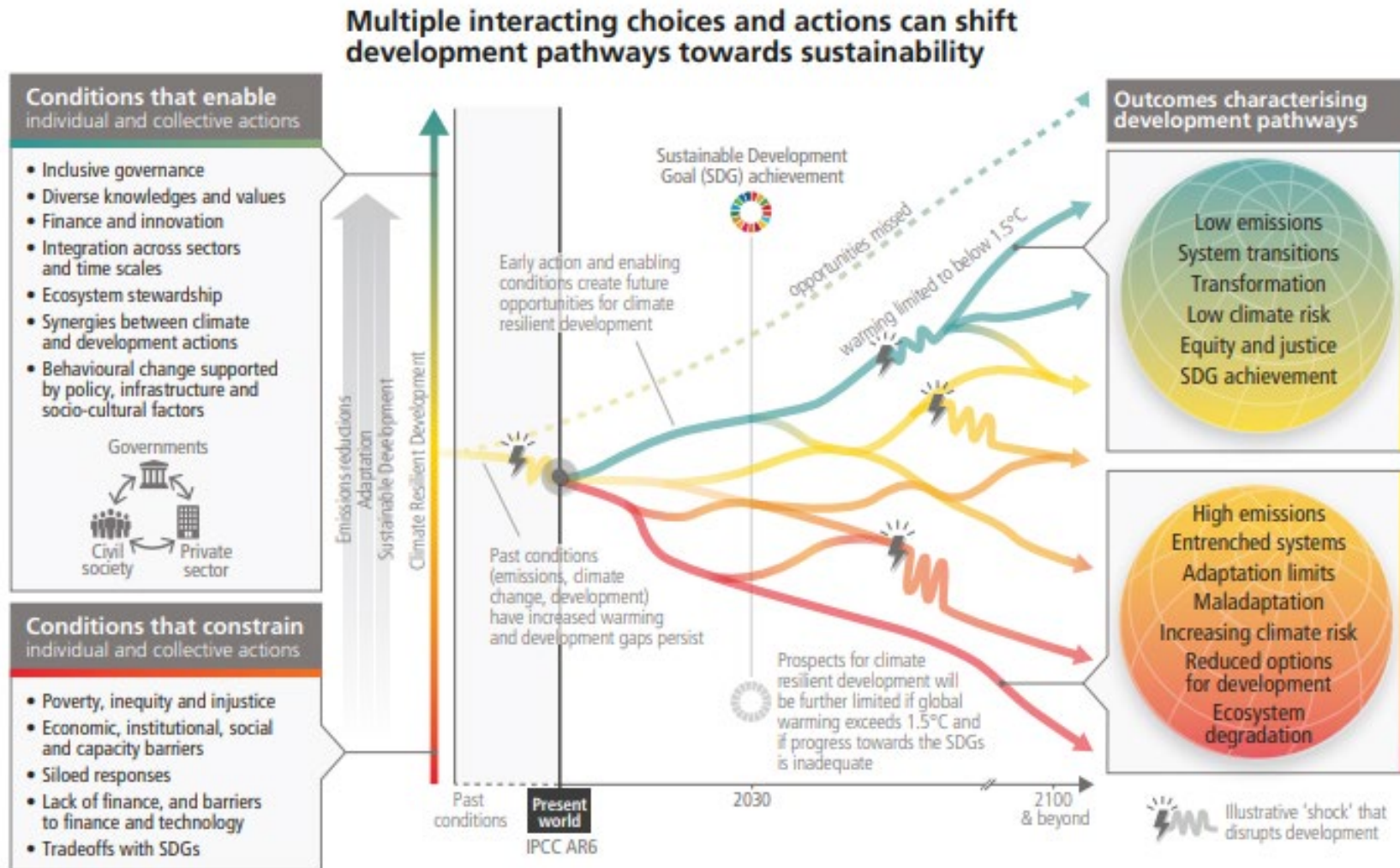


IPCC AR6 (2022)





Rapidly closing window





Examples of GHG emission trajectories in ECA

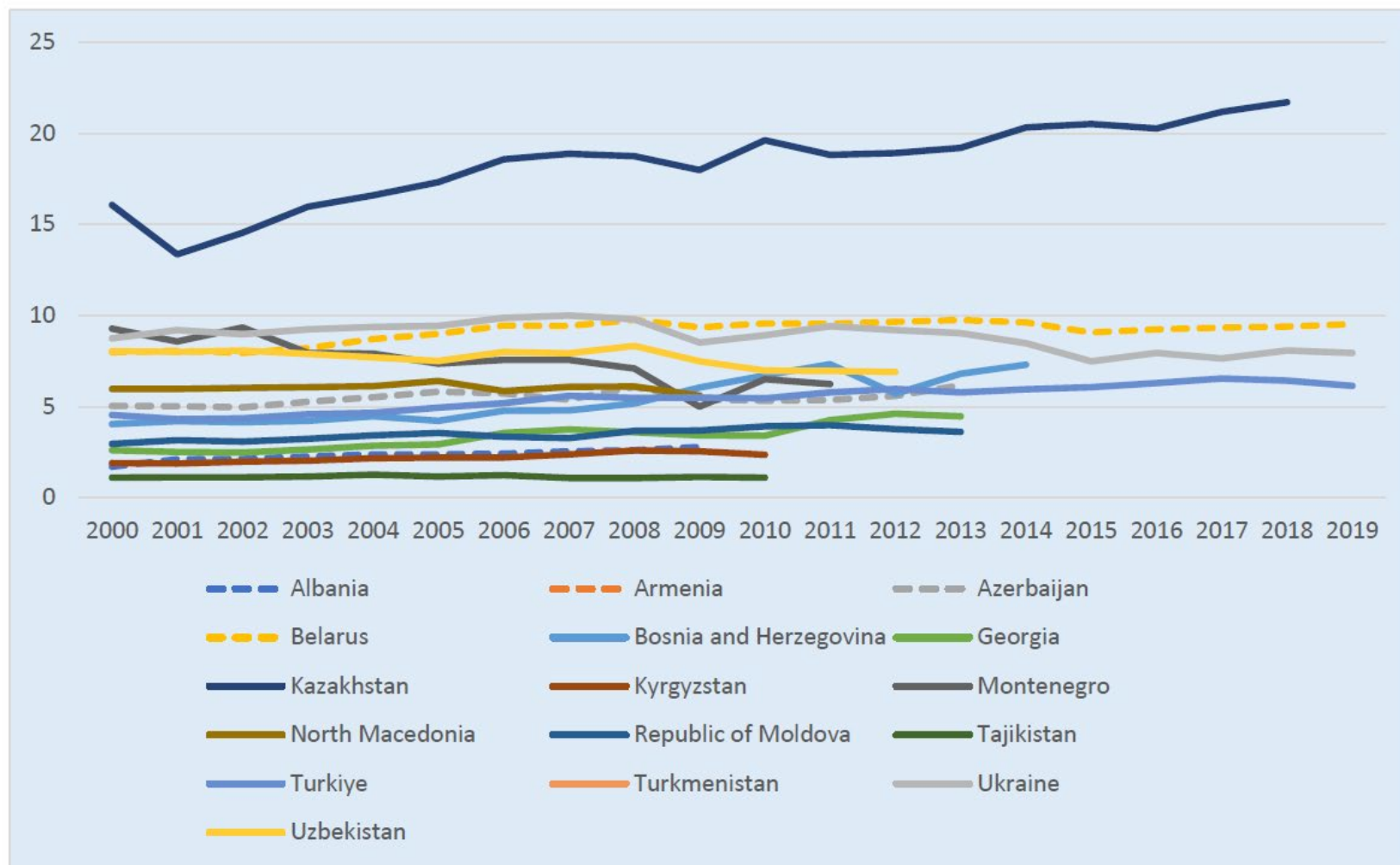


Figure 1: Total greenhouse gas emissions without LULUCF (t CO₂ equivalent) per capita, 2000–2019 ⁵

INFO <https://uneuropecentralasia.org/en/ibc-environmental-coalition>



Renewable energy share trajectories in ECA

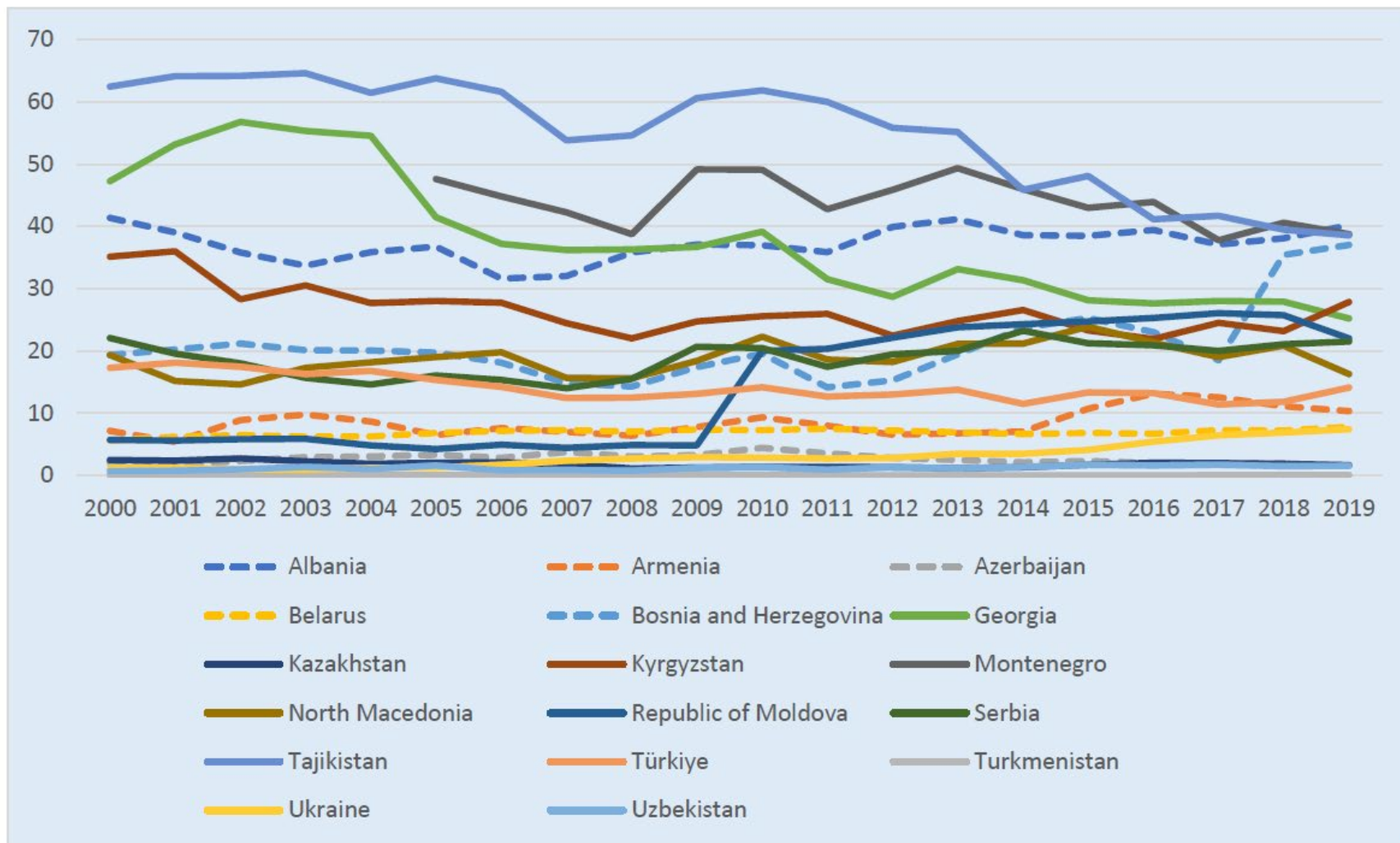
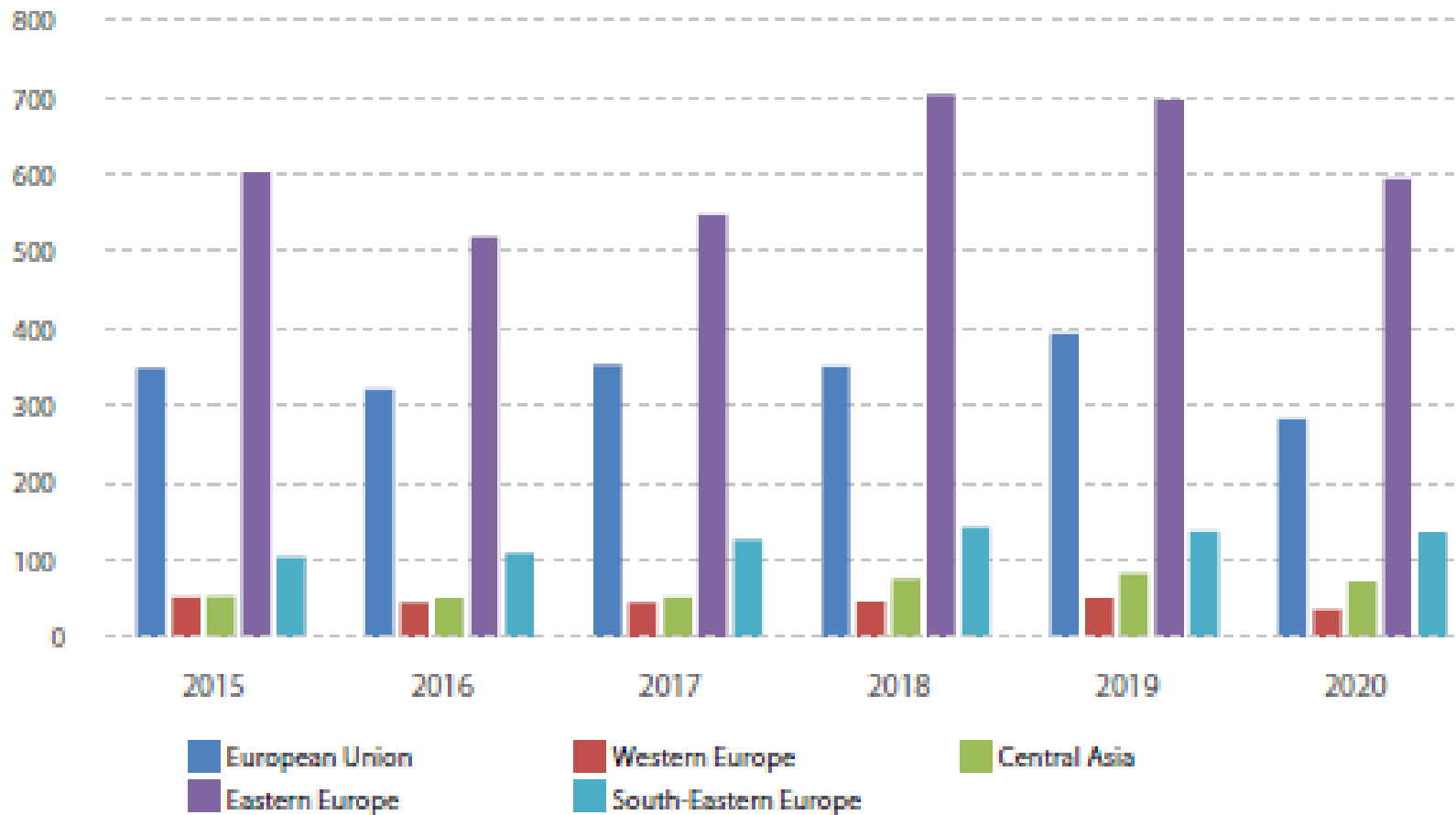


Figure 2: Renewable energy share in the total final energy consumption (per cent), 2000–2019⁶



Fossil fuel subsidies by subregion

Figure 43 Total fossil fuel subsidies, by subregion, 2015–2020 (Billions of United States dollars)



Source: IMF, "Government Policy Indicators", Climate Change Dashboard (accessed on 24 January 2022).

Note: No data for Andorra, Liechtenstein and Monaco.



Fossil fuel subsidies: country examples

Table 32 Fossil fuel subsidies and gross domestic product per capita, 2019

Country	Total fossil fuel subsidies (implicit and explicit) (Percentage of GDP)	Explicit fossil fuel subsidies (Percentage of GDP)	GDP per capita (United States dollars)
Kyrgyzstan	22.0	6.5	1 117.5
Tajikistan	16.2	8.0	1 123.2
Uzbekistan	22.2	3.7	2 464.5
Ukraine	31.9	4.9	3 224.6
Republic of Moldova	9.0	4.4	3 712.4
Armenia	10.4	5.4	4 732.1
Georgia	12.6	4.1	4 977.5
Albania	1.9	0.0	5 207.3
North Macedonia	14.0	1.2	5 625.7
Azerbaijan	33.4	5.7	5 895.2

Sources: Data on GDP per capita provided by the World Bank. Data pertaining to estimated fossil fuel subsidies provided by IMF.



UNEP 2022 emissions gap report

To get on track to meet the Paris Agreement goal, GHGs need to be reduced by unprecedented levels by 2030

- Current NDCs emissions reductions estimate by 2030: by **5 to 10%** compared with emissions based on policies currently in place
- To get on a least-cost pathway to limiting global warming to 2°C and 1.5°C, this needs to be **30 to 45%**
- After 2030 emissions must continue to decline rapidly to avoid exhausting the remaining atmospheric carbon budget



Transformations required

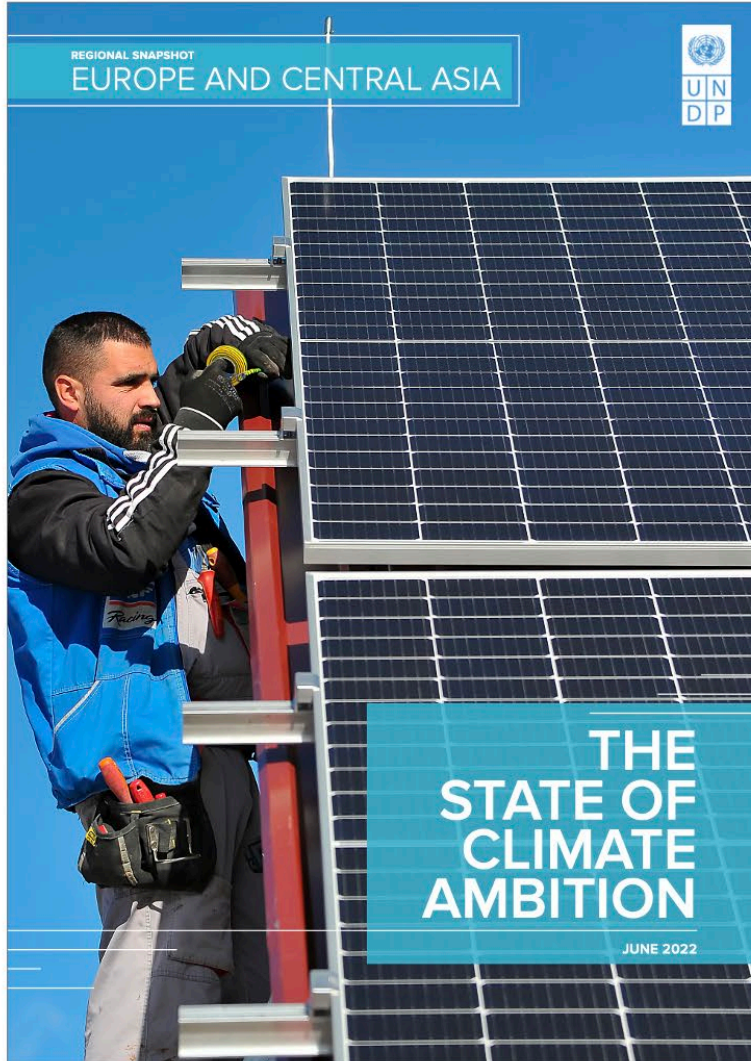
- Much faster **net-zero transformation** in electricity supply, industry, transportation and buildings
- **Food systems** (1/3 of total emissions) reform to cut FS emissions by 2/3 by 2050 (or double current emissions by 2050 under BAU)
- **Financial system** transformation

Current NDCs implementation and tracking

Next cycle of NDCs informed by science, GST and ambition



CLIMATE PROMISE



NDC Outlook and Commitments for the ECA Region

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Nuri Özbaçdatlı
UNDP



The Western Balkans and Türkiye

Albania, BiH, Kosovo, Montenegro, Serbia, North Macedonia, Türkiye



Eastern Partnership and Belarus

Armenia, Azerbaijan, Georgia, Moldova, Ukraine, Belarus



Central Asia

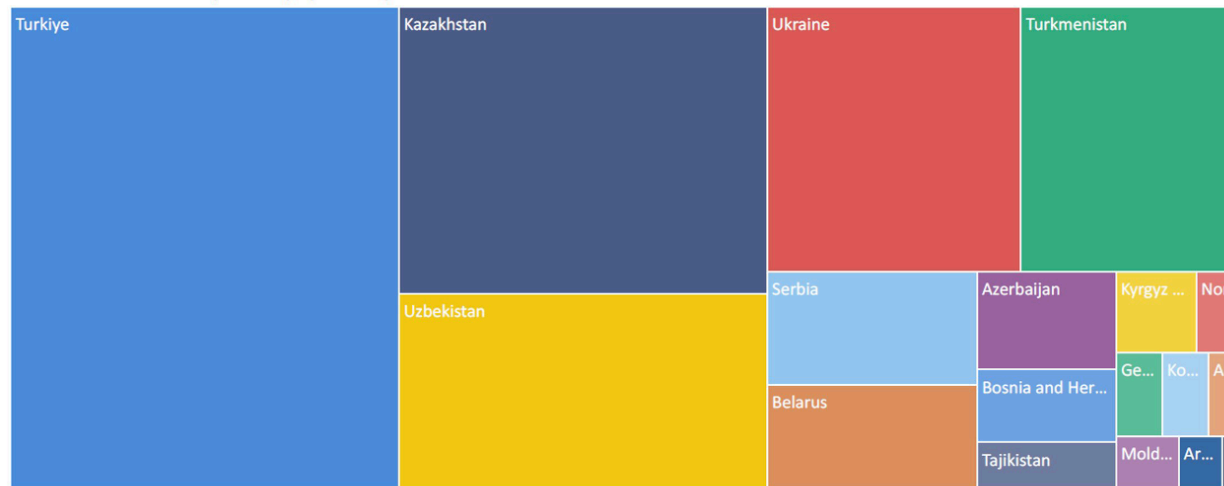
Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan



Regional Challenges

- Climate induced disasters
- Water shortage
- Food and energy security
- High level of energy intensity
- High resource inefficiency
- Fossil fuel addiction
- Untapped renewable energy and energy efficiency capacity.
- War in Ukraine, earthquake in Türkiye, mass population movement in the region, polarization, high inflation, and other socio and economic tensions

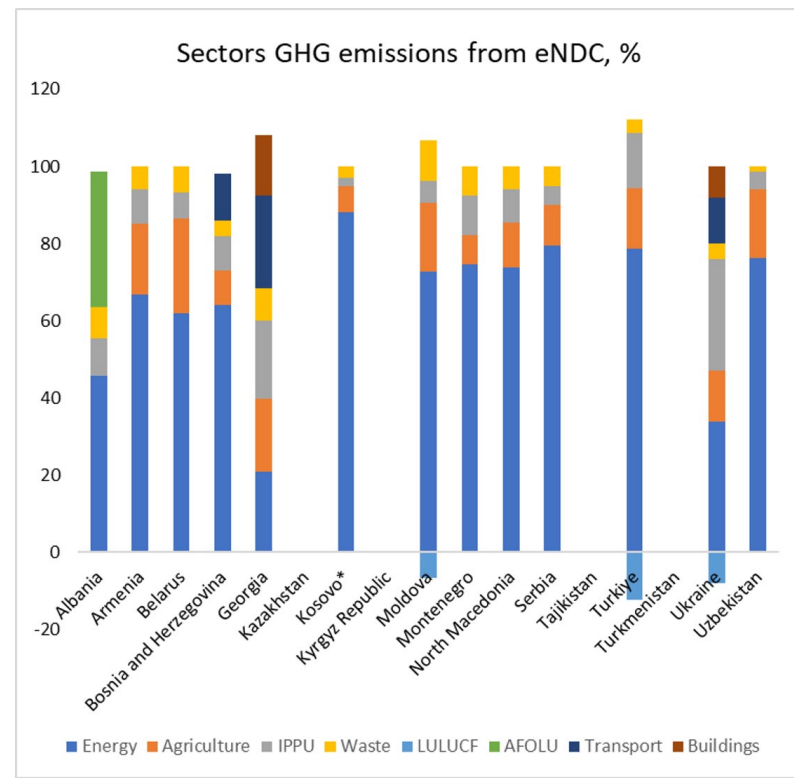
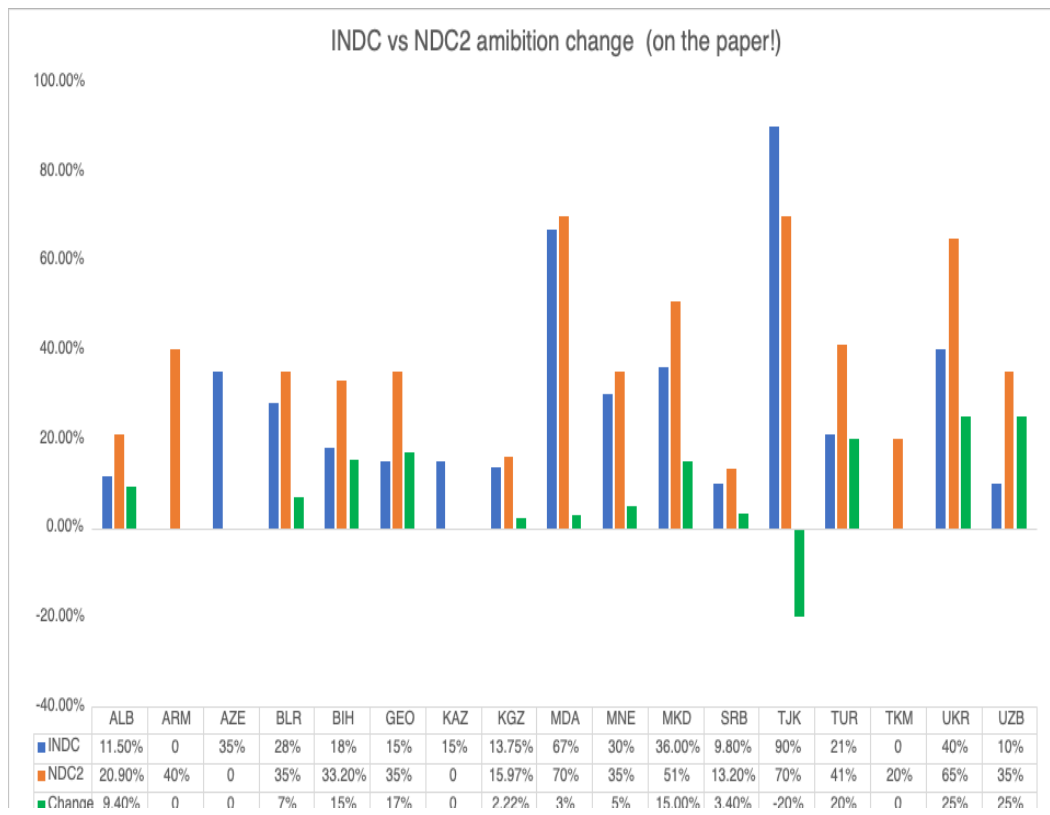
Sum of GHG Emissions (kt CO2e) by Country





NDCs in the Region

Country	Gases Covered						
	CO2	CH4	N2O	PFC	HFCs	SF6	NF3
Albania	v						
Kosovo*	v	v	v				
North Macedonia	v	v	v				
Tajikistan	v	v	v				
Turkmenistan	v	v	v				
Azerbaijan	v	v	v		v		
Bosnia and Herzegovina	v	v	v		v		
Uzbekistan	v	v	v		v		
Armenia	v	v	v		v	v	
Belarus	v	v	v	v	v	v	
Kazakhstan	v	v	v	v	v	v	
Montenegro	v	v	v	v	v	v	
Georgia	v	v	v	v	v	v	v
Kyrgyz Republic	v	v	v	v	v	v	v
Moldova	v	v	v	v	v	v	v
Serbia	v	v	v	v	v	v	v
Turkiye	v	v	v	v	v	v	v
Ukraine	v	v	v	v	v	v	v





COORDINATION

Q2 – NDC governmental coordination mechanism in place?				
Regions	In preparation	No	Yes	Global Total
RBA	15%	6%	79%	100%
RBAP	10%	5%	86%	100%
RBAS	18%	12%	71%	100%
RBEC	31%	6%	63%	100%
RBLAC	11%	7%	81%	100%
Global Total	16%	7%	77%	100%
actual #	5	1	10	16

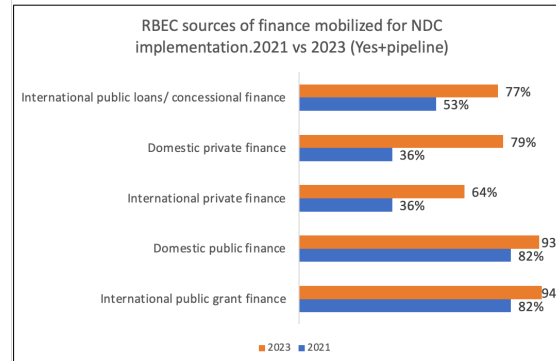
Q4 – NDC stakeholder coordination mechanism in place?				
Regions	In preparation	No	Yes	Global Total
RBA	30%	9%	61%	100%
RBAP	10%	10%	81%	100%
RBAS	18%	24%	59%	100%
RBEC	31%	13%	56%	100%
RBLAC	33%	19%	48%	100%
Global Total	25%	14%	61%	100%
actual #	5	2	9	16

NDC IMPLEMENTATION PLAN

Q7 - NDC Implementation plan in place?					
Regions	In progress	No	Yes	Yes, but needs to be updated to reflect the revised NDC	Global Total
RBA	18%	15%	42%	24%	100%
RBAP	19%	5%	57%	19%	100%
RBAS	29%	24%	18%	29%	100%
RBEC	44%	6%	44%	6%	100%
RBLAC	22%	15%	52%	11%	100%
Global Total	25%	13%	44%	18%	100%
actual #	7	1	7	1	16

Q9 - NDC Implementation plan link to other relevant plans/strategies?				
Regions	No	Not applicable	Yes	Global Total
RBA	10%	5%	85%	100%
RBAP	0%	6%	94%	100%
RBAS	0%	13%	88%	100%
RBEC	0%	0%	100%	100%
RBLAC	15%	5%	80%	100%
Global Total	6%	5%	88%	100%
actual #			13	13

FINANCE



Q19a? – International public grant finance				
Regions	No	Pipeline	Yes	Global Total
RBA	0%	25%	75%	100%
RBAP	5%	16%	79%	100%
RBAS	19%	6%	75%	100%
RBEC	6%	6%	88%	100%
RBLAC	0%	4%	96%	100%
Global Total	5%	13%	83%	100%
actual #	1	1	14	16

IMPLEMENTATION

Q21 – Adaptation measures being implemented?			
Count of 21.	No	Yes	Global Total
RBA	21%	79%	100%
RBAP	14%	86%	100%
RBAS	12%	88%	100%
RBEC	6%	94%	100%
RBLAC	4%	96%	100%
Global Total	12%	88%	100%
actual #	1	15	16

Top 3 adaptation sectors :

1. Agriculture (11)
2. Forestry (10)
3. Water (9)

* North Macedonia is 1 No

Q23 – Mitigation measures being implemented?			
Regions	No	Yes	Global Total
RBA	18%	82%	100%
RBAP	0%	100%	100%
RBAS	18%	82%	100%
RBEC	6%	94%	100%
RBLAC	0%	100%	100%
Global Total	9%	91%	100%
actual #	1	15	16

Top 3 mitigation sectors :

1. Energy (14)
2. Energy efficiency (12)
3. Transport (11)

* Tajikistan is 1 No

TRANSPARENCY

Q25a – Mitigation MRV				
Regions	In preparation	No	Yes	Global Total
RBA	70%	9%	21%	100%
RBAP	43%	5%	52%	100%
RBAS	47%	35%	18%	100%
RBEC	69%	6%	25%	100%
RBLAC	33%	30%	37%	100%
Global Total	53%	17%	31%	100%
actual #	11	1	4	16

* Tajikistan is 1 No

Q25b– Adaptation MRV?				
Regions	In preparation	No	Yes	Global Total
RBA	55%	18%	27%	100%
RBAP	57%	24%	19%	100%
RBAS	59%	29%	12%	100%
RBEC	69%	13%	19%	100%
RBLAC	30%	33%	37%	100%
Global Total	52%	24%	25%	100%
actual #	11	2	3	16

* Georgia and Kyrgyz Republic are the 2 Nos

Q25c– Finance MRV?				
Regions	In preparation	No	Yes	Global Total
RBA	58%	24%	18%	100%
RBAP	48%	29%	24%	100%
RBAS	53%	47%	0%	100%
RBEC	81%	13%	6%	100%
RBLAC	48%	33%	19%	100%
Global Total	56%	29%	15%	100%
actual #	13	2	1	16

* Kazakhstan and Moldova are the 2 Nos

Q25d – National GHG emission inventory				
Regions	In preparation	No	Yes	Global Total
RBA	61%	6%	33%	100%
RBAP	38%	10%	52%	100%
RBAS	24%	35%	41%	100%
RBEC	38%	0%	63%	100%
RBLAC	22%	19%	59%	100%
Global Total	39%	13%	48%	100%
actual #	6		10	16



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