



a cura di



## LA MAPPA DELLA TRANSIZIONE GLOBALE

**i dati sulle emissioni, le previsioni 2025, gli obiettivi climatici e gli investimenti  
di Europa, USA, Cina e Africa**



Presentato in occasione della Sessione Plenaria internazionale  
degli Stati Generali green economy 2025

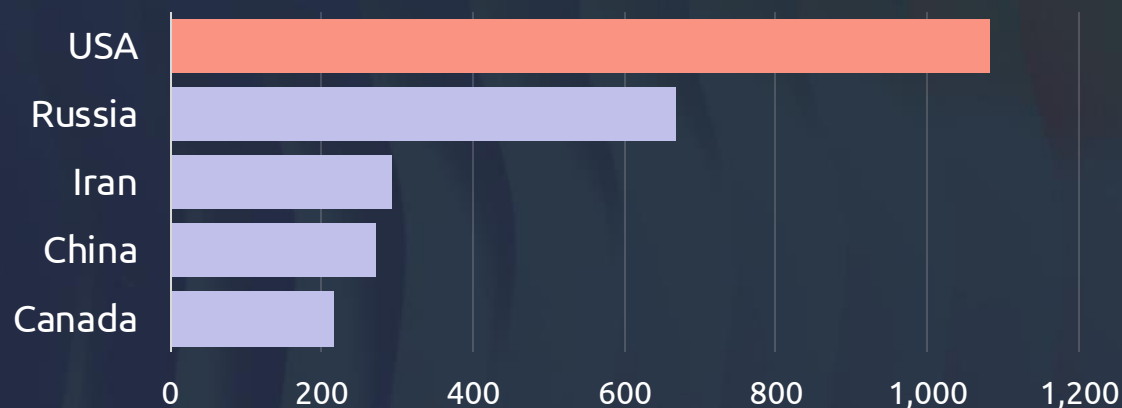
# USA



The new petro-state or  
just ideology ?

*insightCOP30*

### World top 5 natural gas producers (billion cubic meters)



### World top 5 oil producers (billion tons)

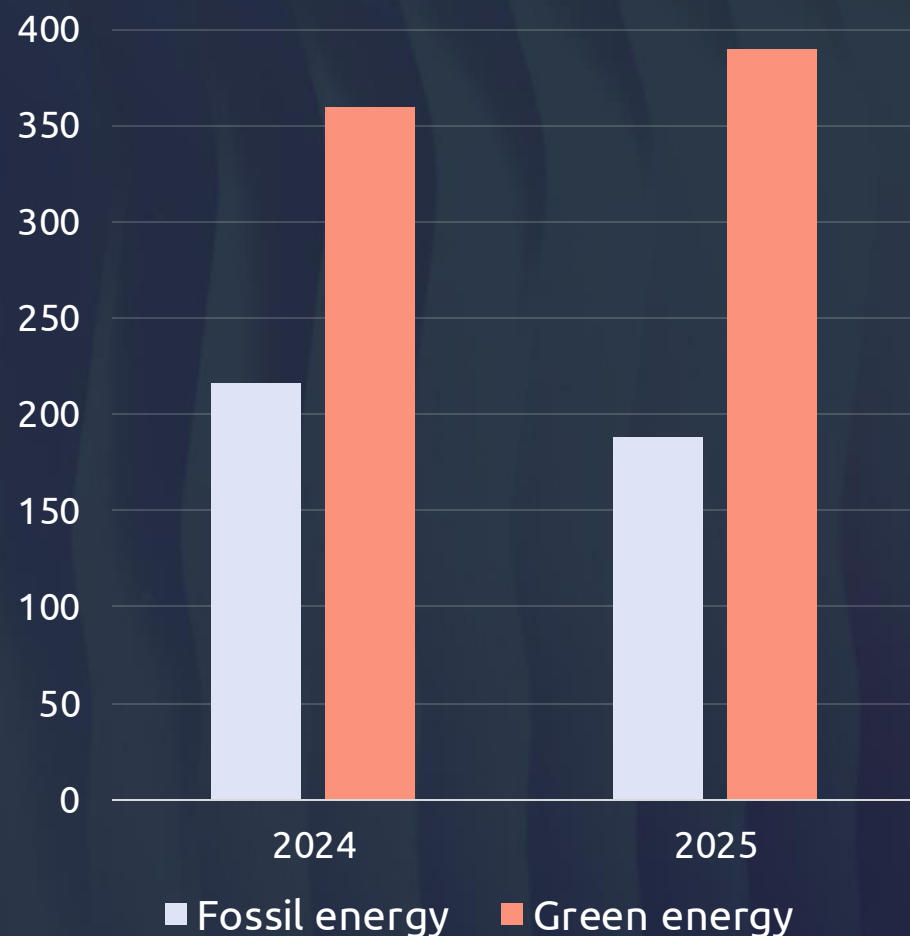


## KEY NUMBERS

- **1<sup>st</sup> per capita emitter** (18 tons of GHG per capita, 3x the global average) and **1<sup>st</sup> country for historical climate responsibility**
- **3,7% cut in CO<sub>2</sub> emissions** from 1990 levels (10x less effort than the EU)
- **1<sup>st</sup> world gas and oil supplier**, despite the world living the “age of electricity”, the US seems to be willing to drive economic growth as a **petro-state**
- **EV market continues to grow** (+10% in 2024, 1.6 billion EVs sold), although **Tesla is no longer the 1<sup>st</sup> world EV producer** (surpassed by Chinese BYD)

Data sources: Global Carbon Budget, JRC, IEA,

## Energy investments in the USA (billion \$)



## WHAT TO EXPECT FROM 2025?

- **+1,8% CO<sub>2</sub> emissions increase forecast in 2025**, due to increased coal consumption in the power sector and a record high of 91.4 billion cubic feet per day of natural gas
- **390 million \$ investments** in renewable energy, grids and energy efficiency (2<sup>nd</sup> after China, surpassing the EU)
- The IEA **reduced by 45% its 2025-2030 forecast about renewables in the US**. Hard to make forecast, but still a signal
- Passenger EV sales in USA expected to rise to **4.1 million in 2030** and make up 27% of total car sales (-40% from previous forecast)

Data sources: IEA, US EIA

## MAIN CLIMATE TARGETS (as of October 2025)

- The US withdrew from the Paris Agreement
- 2030 and 2035 targets, as well as the Net Zero target, have been cancelled
- **“You need strong borders and traditional energy sources if you are going to be great again.”**  
*(President Trump at the UN Climate Summit, September 2025)*



Decarbonization targets and policies:  
***Critically insufficient***

**“Mr Trump’s anti-solar crusade may end up calling to mind the Eagles’ best-known hit, “Hotel California”.**

*You can check out any time you like,  
but you can never leave*

*The Economist, 16 September 2025*

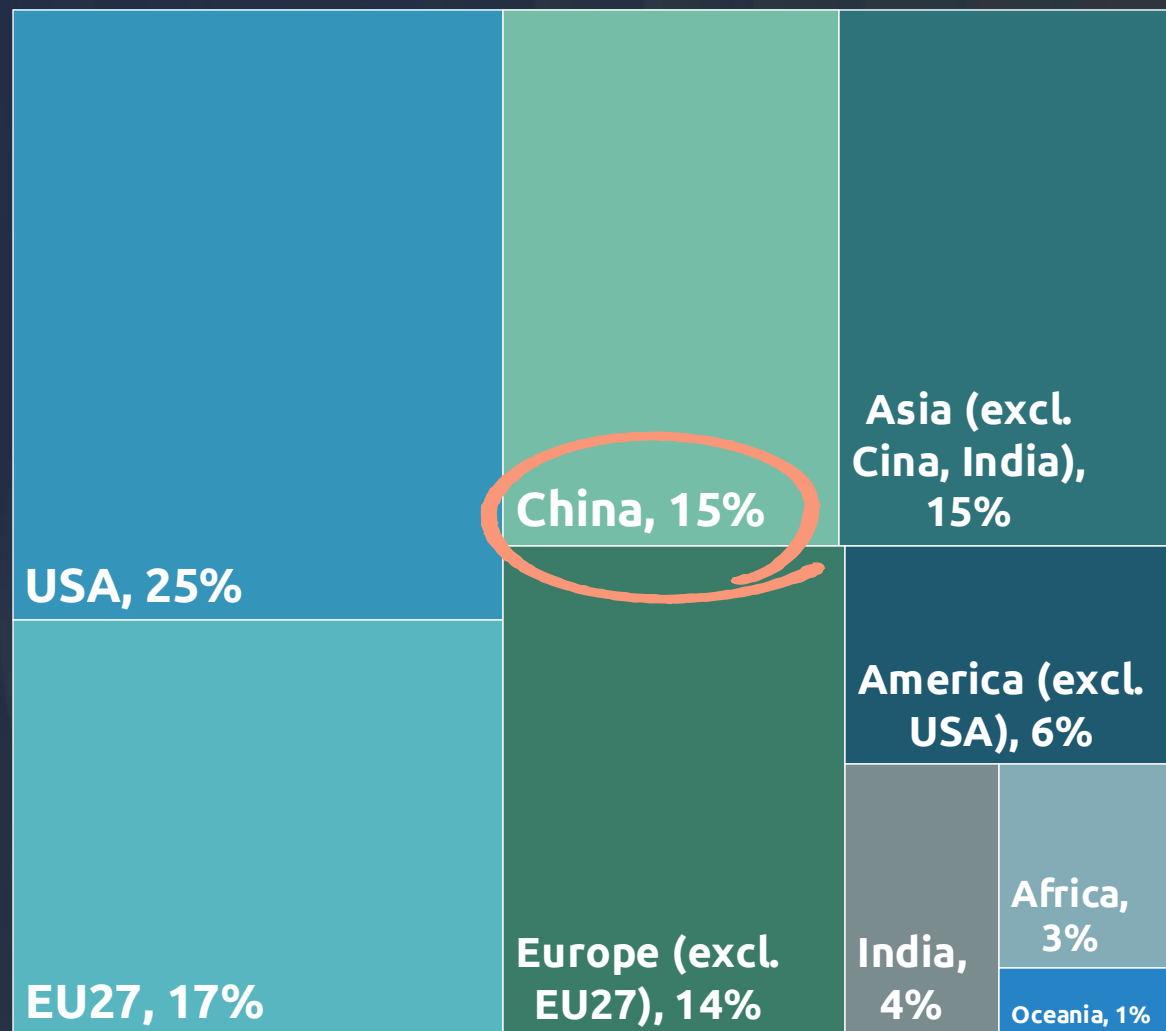


# CHINA

The electro-state  
on the green route

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## CO<sub>2</sub> emissions historical responsibility (cumulative CO<sub>2</sub> from 1850 to 2023)

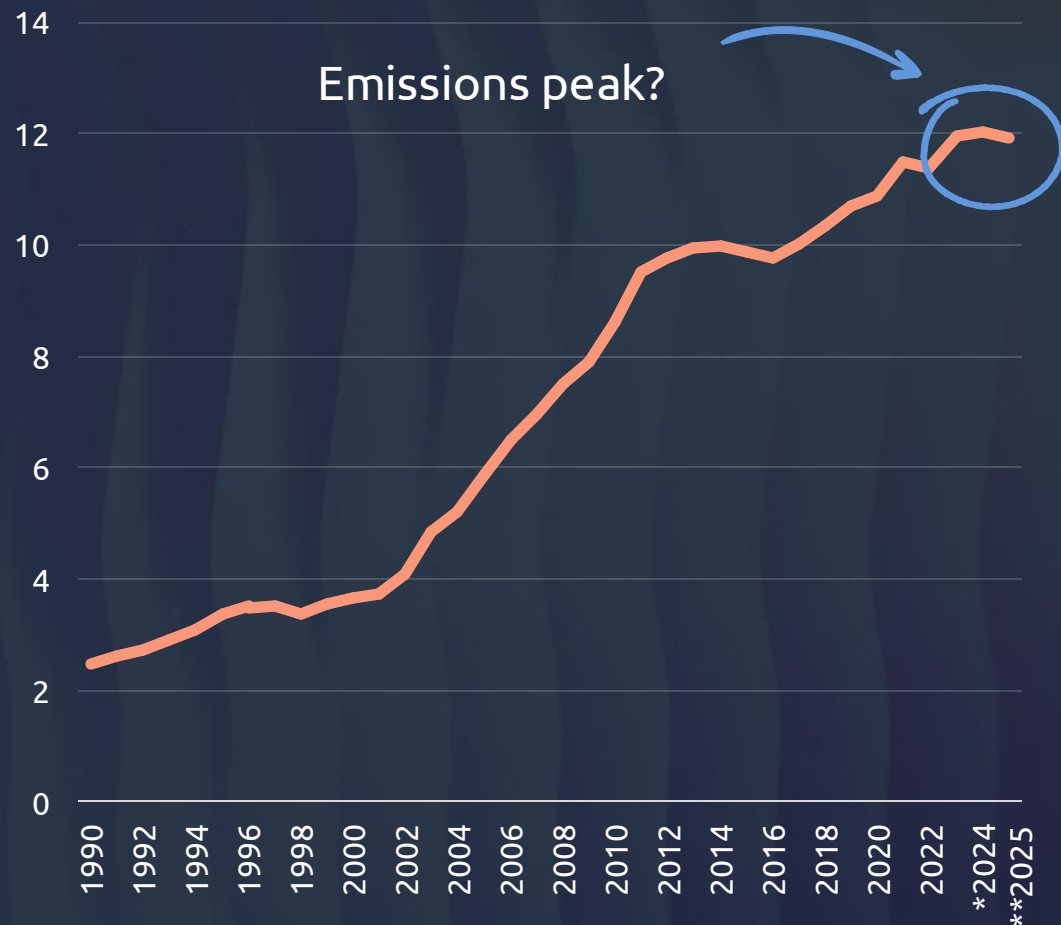


## KEY NUMBERS

- **1<sup>st</sup> world emitter**, 12 billion tons CO<sub>2</sub> in 2024 (**32% of global CO<sub>2</sub> emissions**)
- **3<sup>rd</sup> country for historical climate responsibility** (might pass EU27 soon)
- Leader of green technologies: **80% of solar panels, 60% of wind turbines and 50% of EVs** are produced in China
- **29% of energy consumption is electric**, China is aiming to become a first major **electro-state**
- **1<sup>st</sup> world coal supplier** (58% of global coal supply)

Data sources: Global Carbon Budget, IEA, UNEP

## China CO<sub>2</sub> emissions



## WHAT TO EXPECT FROM 2025?

- **Good news: emissions have been declining steadily** in the past months and 2025 might be a decoupling year, as CO<sub>2</sub> emissions are declining while the economy is rising (+4,8% expected)
- Mixed bag from the power sector: **both solar (+200-300 GW) and coal (+80-100 GW) power plants are expected to set records** in 2025
- 2025 possibly hitting a new record of 14 million EV sales (ca. **50% of new cars** and 70% of global sales). 1 in 10 cars is already electric in China
- China is struggling with **oversupply of green technologies and change of supporting policies**. Impacts for green growth?

## MAIN CLIMATE TARGETS

(as of October 2025)

- **Emissions peak** forecasted for 2030, but it might occur earlier
- **25%** of energy consumption from non-fossil sources by 2030 (might be achieving this target earlier)
- **1.200 GW of solar and wind** by 2030 (already reached in 2024)



Climate  
Action  
Tracker

Decarbonization  
targets and policies:  
*Highly Insufficient*

## ANNOUNCED UPDATED TARGETS

(24<sup>th</sup> September 2025)

- **7-10% net emissions cut** by 2035 from peak levels (for the first time China commits about an absolute reduction)
- **30%** of energy consumption from non-fossil sources by 2035. Coal consumption has decreased from 70% to 43% since 2000
- **3.200 GW of solar and wind** by 2035
- **net-zero** by 2060, might occur earlier

**“Green and low-carbon transformation is the trend of our times. Despite some countries going against the trend, the international community should stay on the right track, maintain unwavering confidence, unwavering action, and undiminished efforts”**

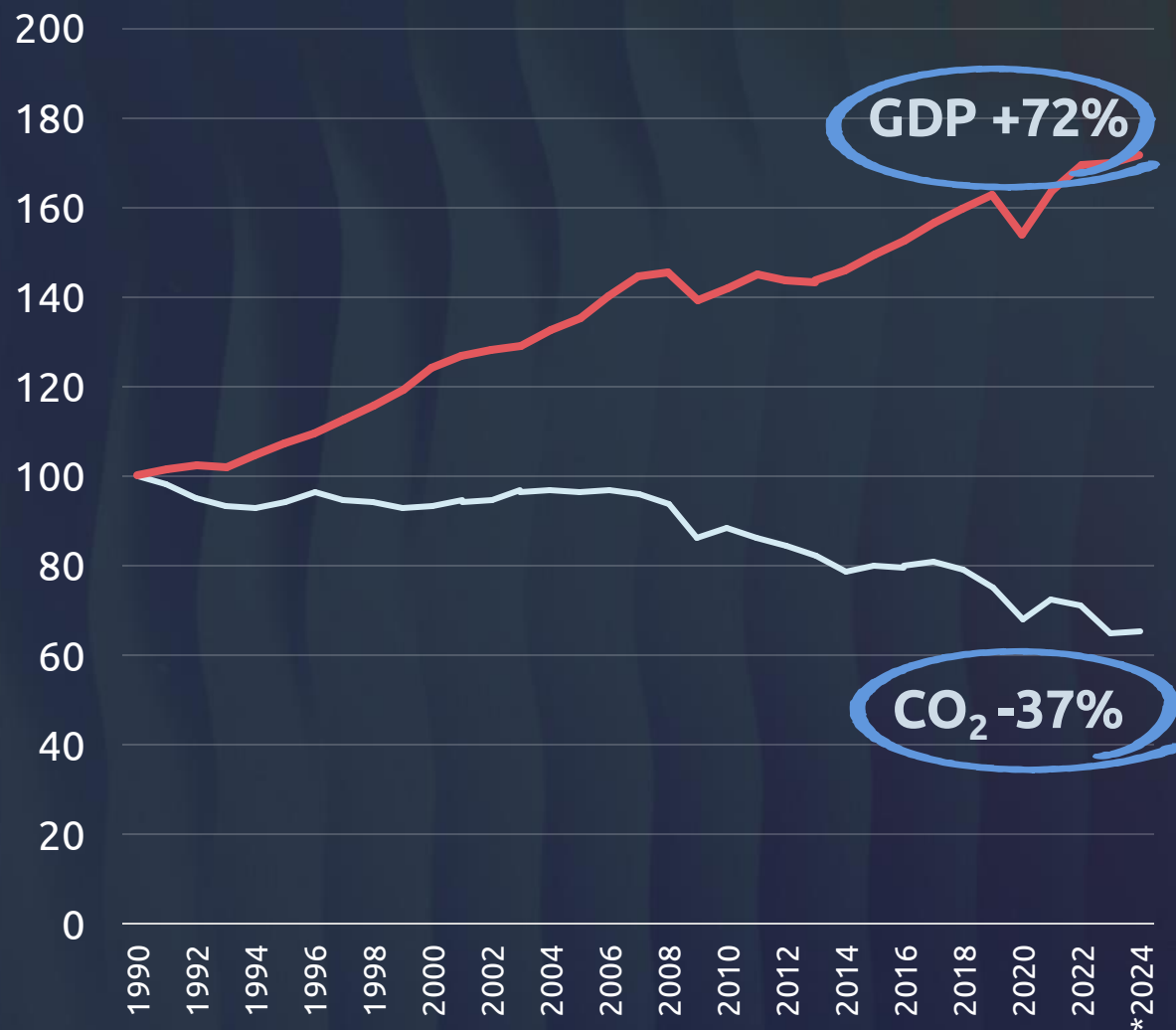
Xi Jinping (24th September 2025)

# EUROPE

The historical leader in green economy

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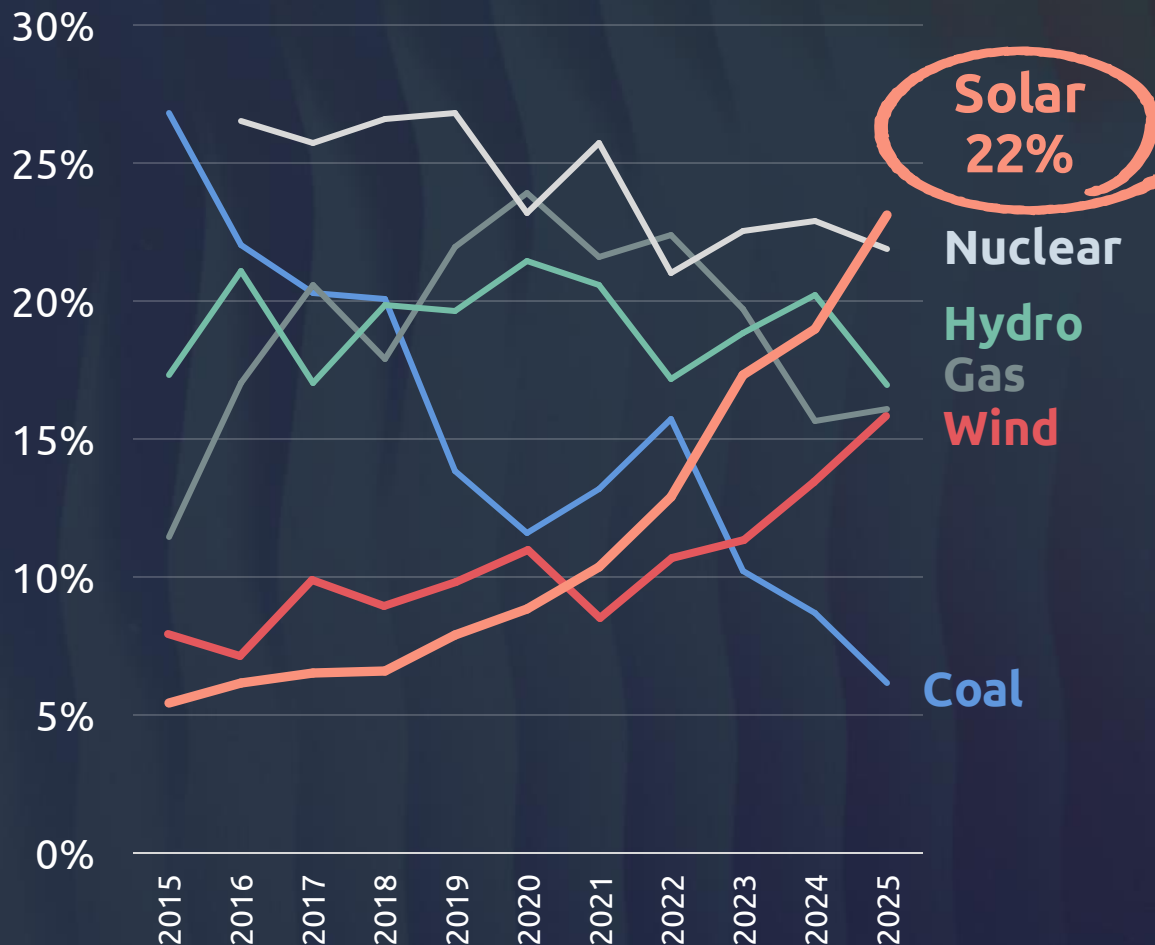
## CO<sub>2</sub> emissions and GDP in the EU (100 = 1990 base year levels)



## KEY NUMBERS

- **58% of energy dependency** from imports and **375 billion € spent** to import fossil fuels in 2024
- **47% of electricity is from renewables** it is 34% in China and 24% in the US
- **-37% of CO<sub>2</sub> emissions since 1990** together with +72% GDP: it's the only big emitter to achieve relevant GHG cut
- **77% of EU citizens** think that the costs of climate change are much higher than the investments needed for decarbonization

## Contribution in the EU from solar generation in the month of June



## WHAT TO EXPECT FROM 2025?

- For the first time in history **solar was the first electricity source** in June 2025 (22%)
- **376 million \$ investments** in renewable energy, grids and energy efficiency (3<sup>rd</sup> economic area after China and the US), it was 166 million \$ 10 years ago
- **4 million EVs** might be sold in 2025, increasing again after 2024 stagnation
- To maintain the EU green leadership and reduce the high costs of dependency from imports, **Eurobonds and Global minimum tax** are options on the table

## MAIN CLIMATE TARGETS

(as of October 2025)

- **55%** emissions cut by 2030 from 1990 levels
- **42,5%** of renewable energy share by 2030
- **Net-zero** by 2050



Climate  
Action  
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Decarbonization  
targets and policies  
are *Insufficient*

## updated NDC

(5<sup>th</sup> November 2025)

- **66.25%-72.5%** emissions cut by 2035 from 1990 levels (indicative target)

### ALSO WORKING TOWARDS

- **90%** net emissions cut by 2040 (with flexibilities for member states)
- **double the circularity rate of materials:** from 11,2% in 2020 to 22,4% in 2030 (Clean Industrial Deal 2025)

**«To those who ask for dismantling climate policies, we humbly reply that the green agenda is one of the main boosts for competition, not an obstacle. We know it because it is what we are already experiencing in our country»**

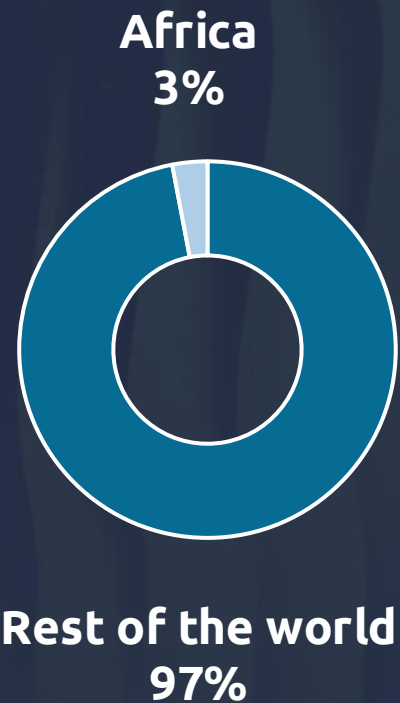
**Pedro Sanchez, Prime Minister of Spain, 23 October 2025**

# AFRICA

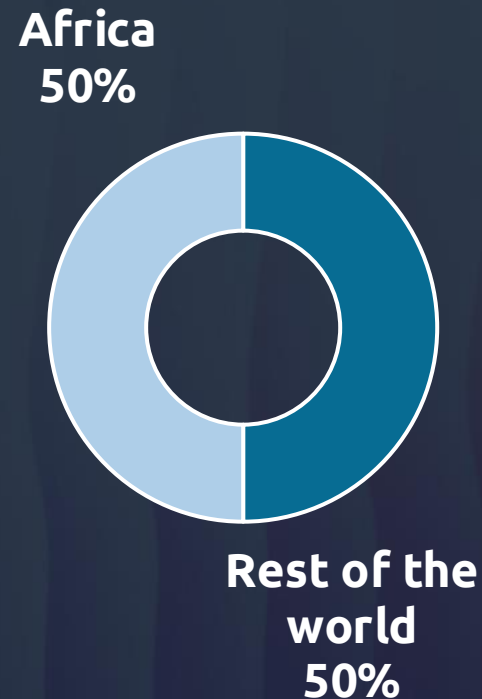
## The future of green economy

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## CO<sub>2</sub> historical responsibility



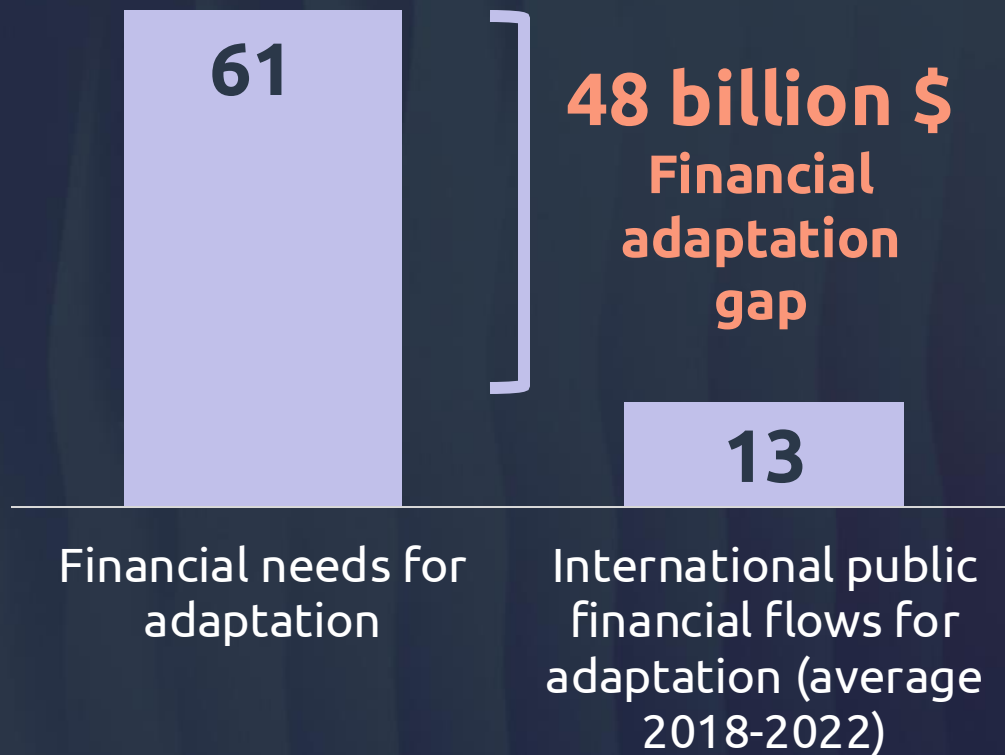
## Impacts from climate change (excess mortality in 2050)



## KEY NUMBERS

- 1.5 billion people live in Africa (more than China)
- African countries only contributed to **3% of historical CO<sub>2</sub> emissions**, but are bearing the highest impacts (such as 50% of excess mortality in 2050)
- **2.2 tons GHG per capita**, 3x less than the global average and 8x less than the US
- **25% of global biodiversity** is in Africa
- 600 million people in Africa do not have access to electricity

## Annual adaptation finance needs VS current flows in Africa (billion \$)



## WHAT TO EXPECT FROM 2025 AND BEYOND?

- 1 in 4 people in 2050 will be African
- Africa holds 60% of the world's best solar resources and **huge critical materials reservoirs** that are essential for green economy
- **Imports of solar panels have been surging** and the renewable energy forecast to 2030 has been increased by 25%
- Financial needs for adaptation are estimated in **61 billion \$ per year up to 2030**
- Africa's ambition is to redefine its role in the global transition, positioning itself as a **hub for solutions**

**“We are not here to negotiate our survival. We are here to design the world’s next climate economy.”**

Ethiopia’s Prime Minister Abiy Ahmed Ali (Nobel Prize)  
at the second African Climate Summit (September 2025)