



Insurance Industry & Climate Change

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Topic: Climate Risks: Impact on Insurance and the Economy (5th Session)

The 3rd Arab Actuaries Congress 2025
El Aurassi Hotel, From July 8 to 10, 2025

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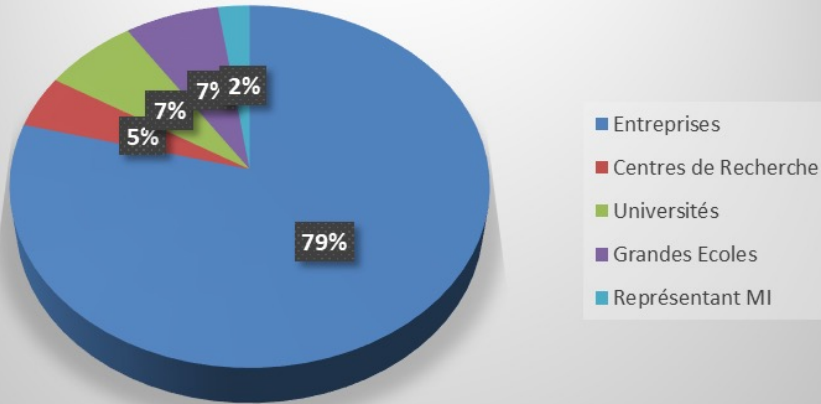
- **Diversity and strong implication in RE program**
- **Arab World: CO2 emitting rank**
- **Arab World: resources under stress**
- **Take Urgent Action to combat Climate Change**
- **Green Insurance: enhancing the trust of investors for green projects**
- **“Go Green” in the Insurance Industry**
- **Key messages**

Source: Photo from . <https://www.undp.org/arab-states/stories/rising-challenge-climate-action-arab-region>

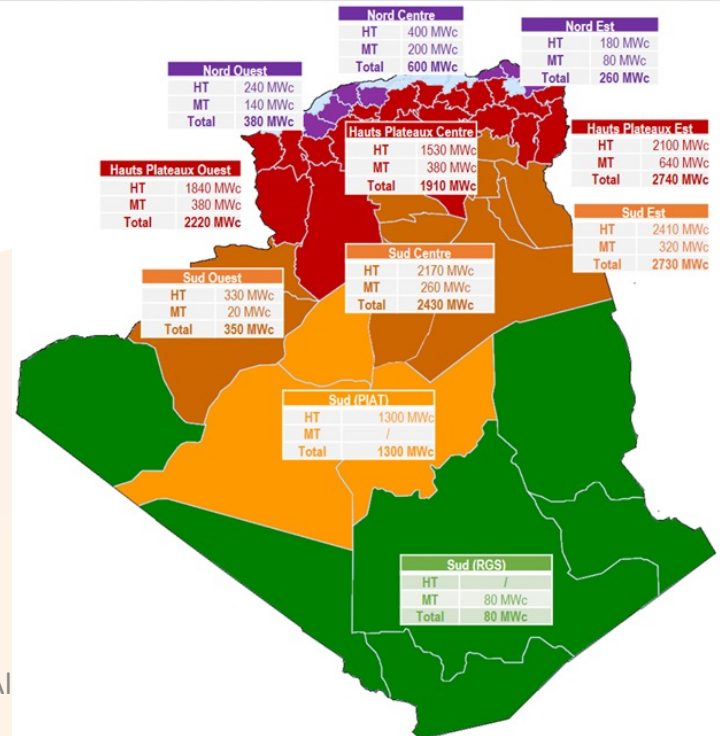
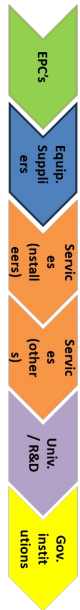
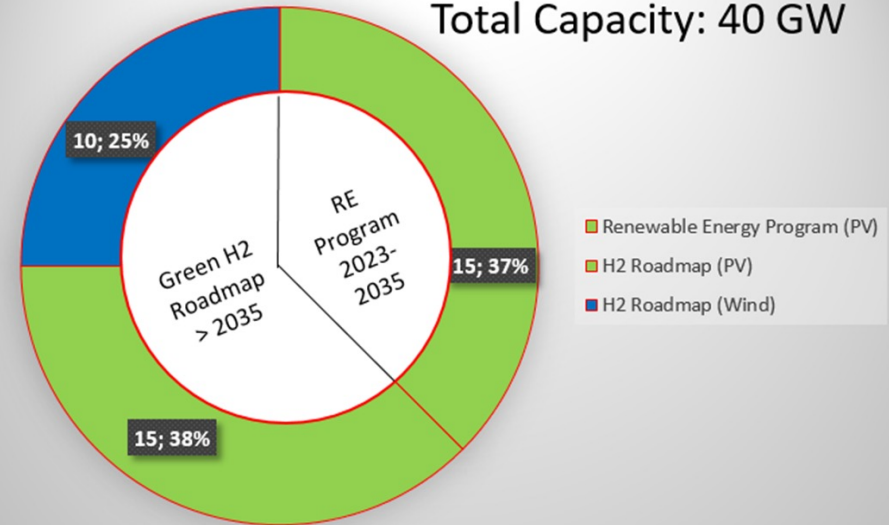


Diversity and strong implication in RE program

GEC'A members (2023)

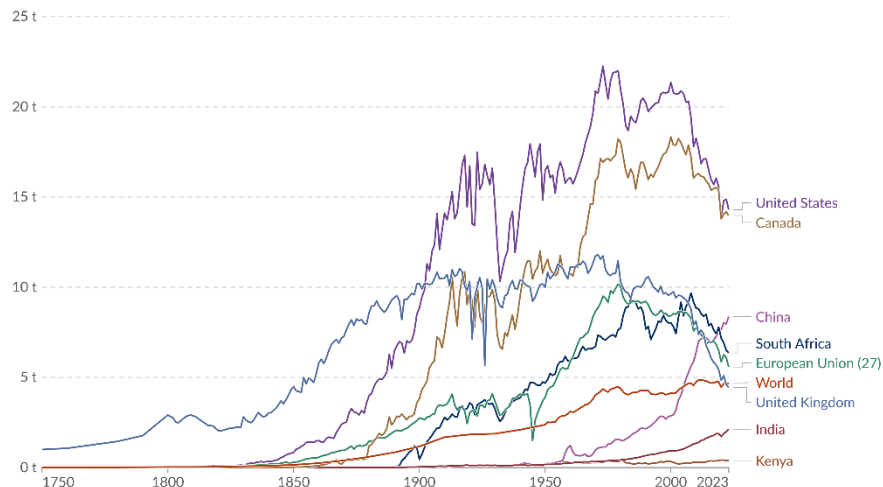


Total Capacity: 40 GW



Per capita CO₂ emissions

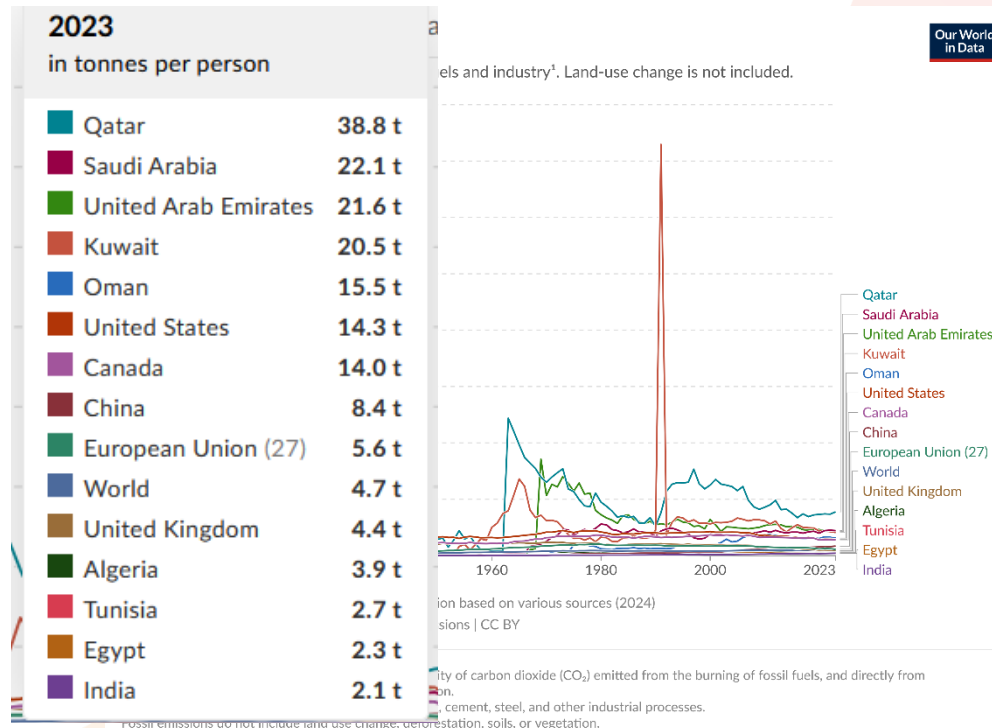
Carbon dioxide (CO₂) emissions from fossil fuels and industry¹. Land-use change is not included.



Data source: Global Carbon Budget (2024); Population based on various sources (2024)
OurWorldinData.org/co2-and-greenhouse-gas-emissions | CC BY

1. Fossil emissions Fossil emissions measure the quantity of carbon dioxide (CO₂) emitted from the burning of fossil fuels, and directly from industrial processes such as cement and steel production. Fossil CO₂ includes emissions from coal, oil, gas, flaring, cement, steel, and other industrial processes. Fossil emissions do not include land use change, deforestation, soils, or vegetation.

Our World
in Data

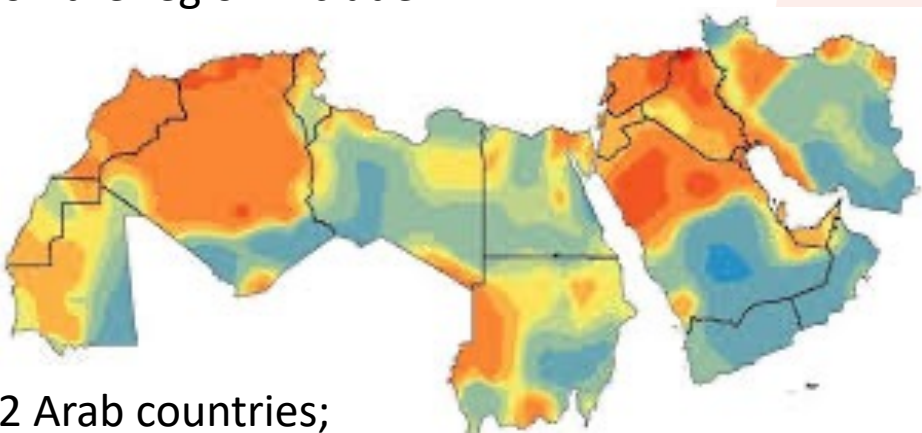


Our World
in Data

- ❑ The share of Arab countries in fossil carbon dioxide amounted to more than two billion tons, which constitutes 5.45% of total global emissions (2021).
- ❑ Some Arab countries have high per capita CO₂ emissions: Qatar, Saudi Arabia, Kuwait, and the UAE have high per capita emissions due to their wealth and energy-intensive industries, particularly related to oil and gas.
- ❑ China, the United States, and India are the top three overall CO₂ emitters.

Arab World: Resources under stress

Specific impacts of climate change on resources on the region include:

- ☐ a lengthening of the dry season for most MENA countries;
 - ☐ It is estimated that by 2050, temperature increases in MENA countries range from 1.5 to 3 °C,
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- ☐ Water scarcity is a major issue for 19 of the 22 Arab countries;
 - ☐ Water resources utilization rate is 76.6% compared to a global average of 7.5%
 - ☐ 85% of water use is utilized by the agriculture sector.
 - ☐ 17 countries also suffer from desertification and land degradation.
 - ☐ Increasing population pressure (estimated 724 million by 2050) leads to higher demands on energy, especially electricity (an increase of 416 % from 1990 to 2022), reaching 1060 TWh in 2020 due to urbanization and industry activities.

Source: Manfred A. Lange. **Impacts of Climate Change on the Eastern Mediterranean and the Middle East and North Africa Region and the Water–Energy Nexus** , <https://www.mdpi.com/2073-4433/10/8/455>

Source: Rabea Hussein Mohammed Qasem a, Miklas Scholz. Climate change impact on resources in the MENA region: a systematic and critical review. <https://www.sciencedirect.com/science/article/pii/S1474706525000865>

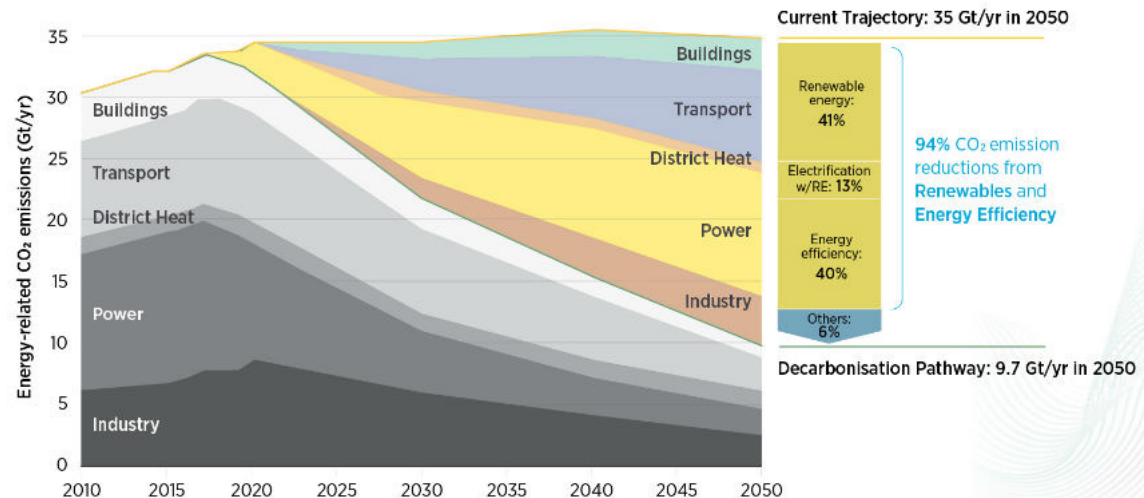
Take Urgent Action to combat Climate Change

Combating climate change and its effects need policies and investments aimed at promoting REs (Renewable Energies). In particular, policies and investments focused on increasing the production of wind energy, biomass energy, geothermal energy, solar energy, and the utilization of energy from waste should be a priority. Based on these findings, the following measures can be adopted:

- ☐ Transition to Renewable Energies
- ☐ Improvement of Energy Efficiency
- ☐ Sustainable Management of Natural Resources
- ☐ Awareness and Education
- ☐ Increase Subsidies and Incentives for Renewable Energies
- ☐ Enforce Stricter Regulations on GHG Emissions
- ☐ Invest in Research and Development of Renewable Energies

GLOBAL ENERGY TRANSFORMATION

Renewables and improved energy efficiency can dramatically reduce energy-related CO₂ emissions.



Source: Iles Abidi and Mariem Nsaibi_ **Assessing the Impact of Renewable Energy in Mitigating Climate Change: A Comprehensive Study on Effectiveness and Adaptation Support.** <https://econjournals.com/index.php/ijeep/article/view/15769>

Source: https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Sep/IRENA_Transforming_2019_Summary.pdf

Green Insurance: enhancing the trust of investors for green projects

- ❑ Investments, infrastructure, and climate change are linked.
- ❑ The insurance industry can bring Green Insurance (GI) to solve environmental hazards and advance sustainability. This will be done by providing coverage for environmentally friendly projects, promoting sustainable business practices and encouraging investment in green technologies.
- ❑ GI can offer cheaper premiums or other financial incentives for projet that adhere to particular environmental requirements (lowering greenhouse gas emissions or fostering biodiversity conservation for example).
- ❑ GI can encourage financial participation in environmentally friendly initiatives by bringing together the interest of insurers, investors anf gouvernements, mainly in developing nations.
- ❑ This will require further government assistance as insurance companies may encounter difficlities negotiating complex regulatory regimes
- ❑ Accompanying companies adopting GI policies to mitigate climate-related risks, particularly in developing countries where investment in sustainable projects is limited.

“Go Green” in the Insurance Industry

- ❑ To "go green" in the insurance industry, companies can start by integrating environmental, social, and governance (ESG) factors into their operations and product offerings.
- ❑ For insurance firms, sustainability is a critical path to greater profitability, and it begins with reducing their own carbon footprint.
- ❑ Proactive insurance leaders must rethink their strategies and begin to implement ESG standards in their evaluation processes. For some insurers, this may mean:
 - limiting their own carbon footprint. This begins with measuring carbon emissions, identifying areas for improvement, and adopting environmentally friendly practices (by adopting green building standards for company facilities, reducing business travel, and transitioning to paperless transactions).
 - allocating funds to support sustainable projects, such as renewable energy initiatives and green infrastructure development.
- ❑ While the insurance sector itself isn't a leading source of greenhouse gas emissions, it certainly holds the power to shape the priorities of major corporations.

- ❑ Decoupling emissions from economic growth is a paramount to reach the Paris Agreement goals by 2050.
- ❑ This will be done in accordance with UN-SDG (Sustainable Development Goals) for 2030. The role of NDC (Nationally Determined Contribution) of each country needs to be aligned with national objectives and international goals.
- ❑ Renewable Energy sources are at the forefront of the transition to a sustainable future, coupled with steadily improving energy efficiency. Large electrification of end-use sectors is also required.
- ❑ Insurance Industry can play a crucial role to accelerate the transition to a greener and a sustainable economy by developing green insurance policies by providing financial security to investors and project developers.
- ❑ Green Insurance will encompass small projects as well big projects improving the health and well-being of communities and reduce financial losses associated with climate-related disasters.
- ❑ to be green, Insurance industry needs to start!