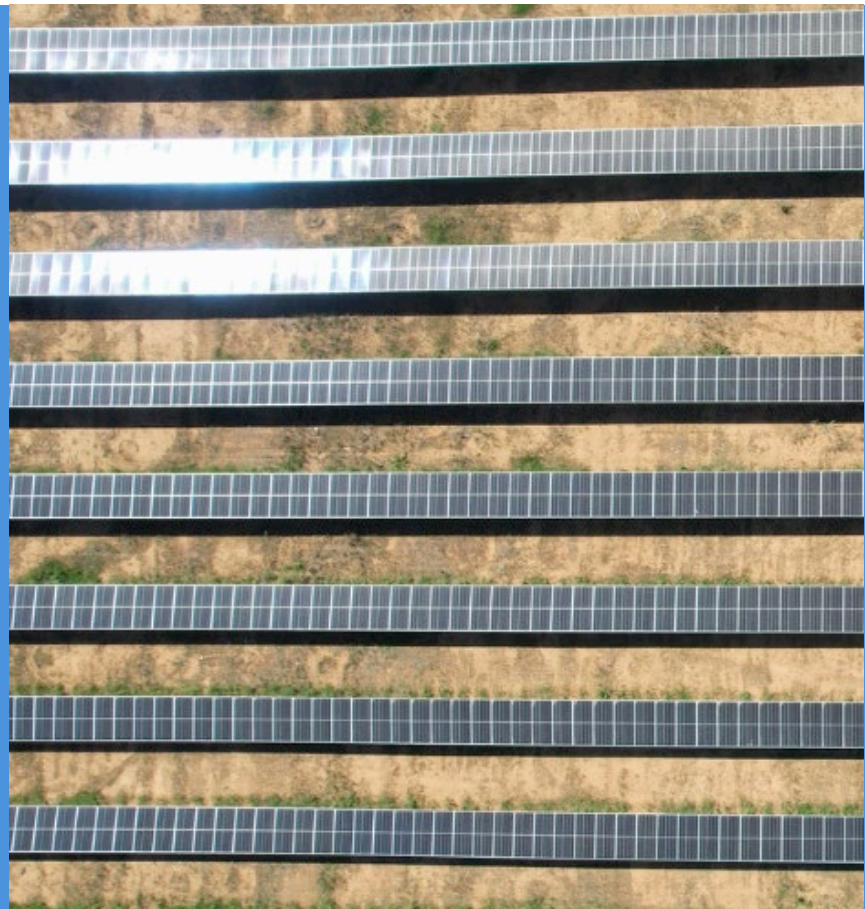


# Empowering climate action through effective collaboration between the **Finance & Technology Mechanism** in the MENA region

GCF Regional Dialogue with MENA  
24-28 June 2024  
Rabat, Morocco



Dietram Oppelt, Vice-Chair, UNFCCC Technology Executive Committee

# Technology Mechanism: Driving integrated climate solutions

## Technology Executive Committee (TEC)

> Policy arm (UNFCCC)

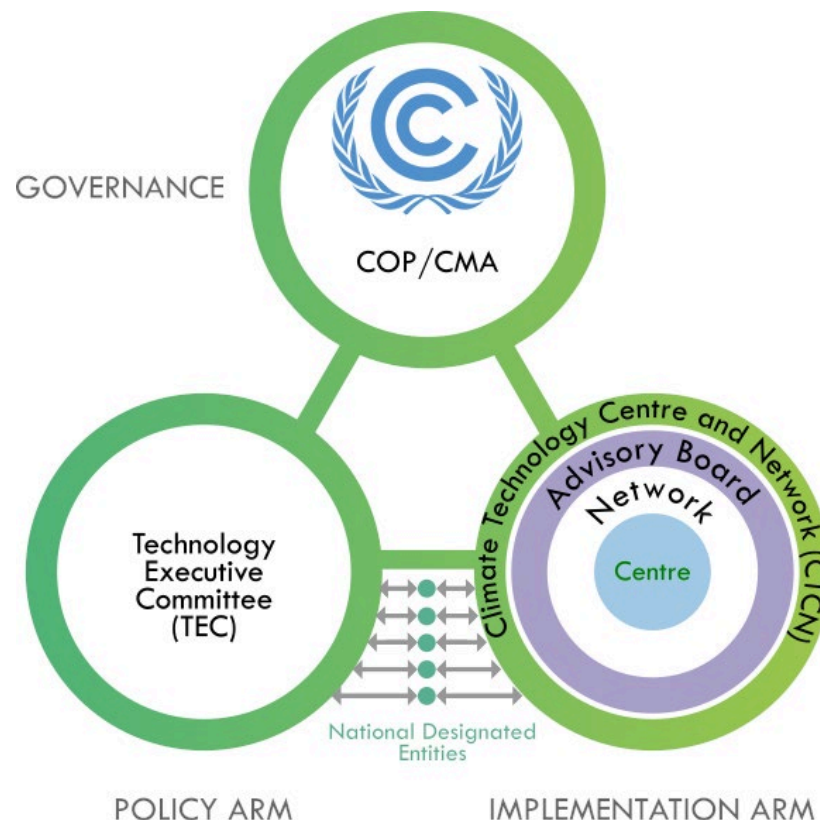
- Climate technology policy & guidance
- Technology planning tools (LT-LEDS, NDCs, TNAs, technology roadmaps)

## Climate Technology Centre and Network (CTCN)

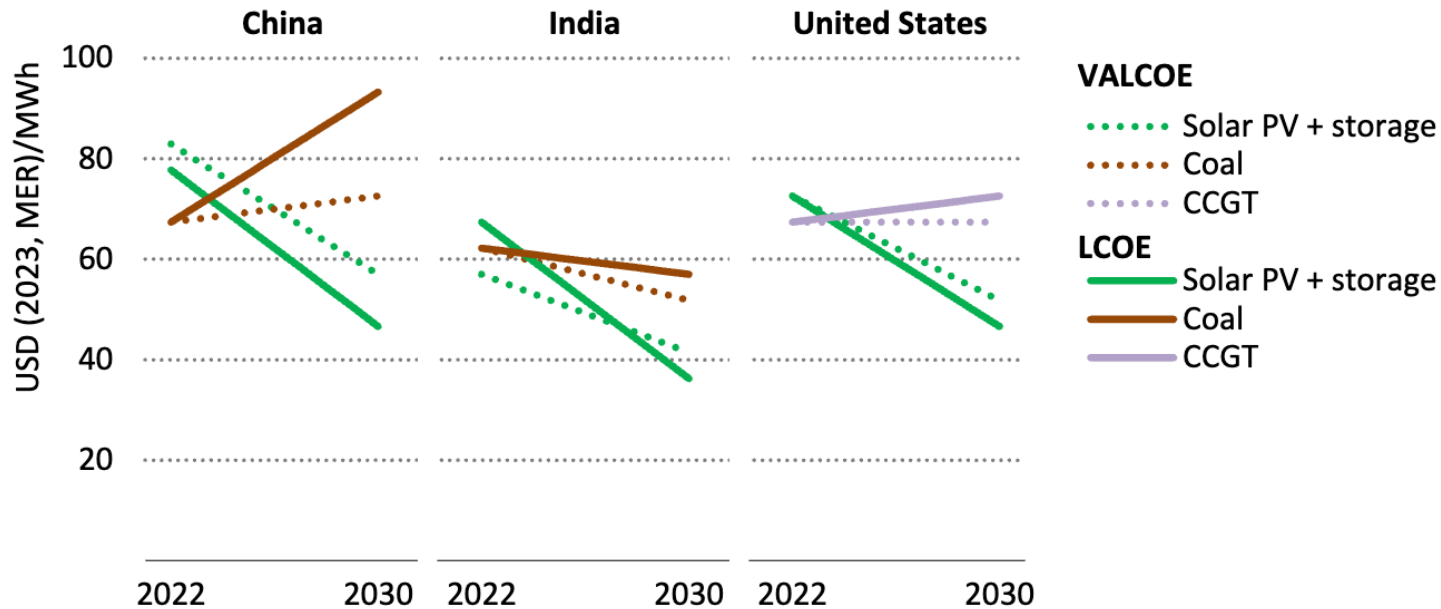
> Implementation arm (UNEP)

- Technical assistance
- Information and knowledge sharing
- Network over 160 NDEs, 800 members

**Effective collaboration between the Technology (TEC&CTCN) and the Financial Mechanism (GCF & GEF) essential for effective implementation**



# Cleantech rapidly becoming more affordable globally, and, often more affordable than fossil fuels



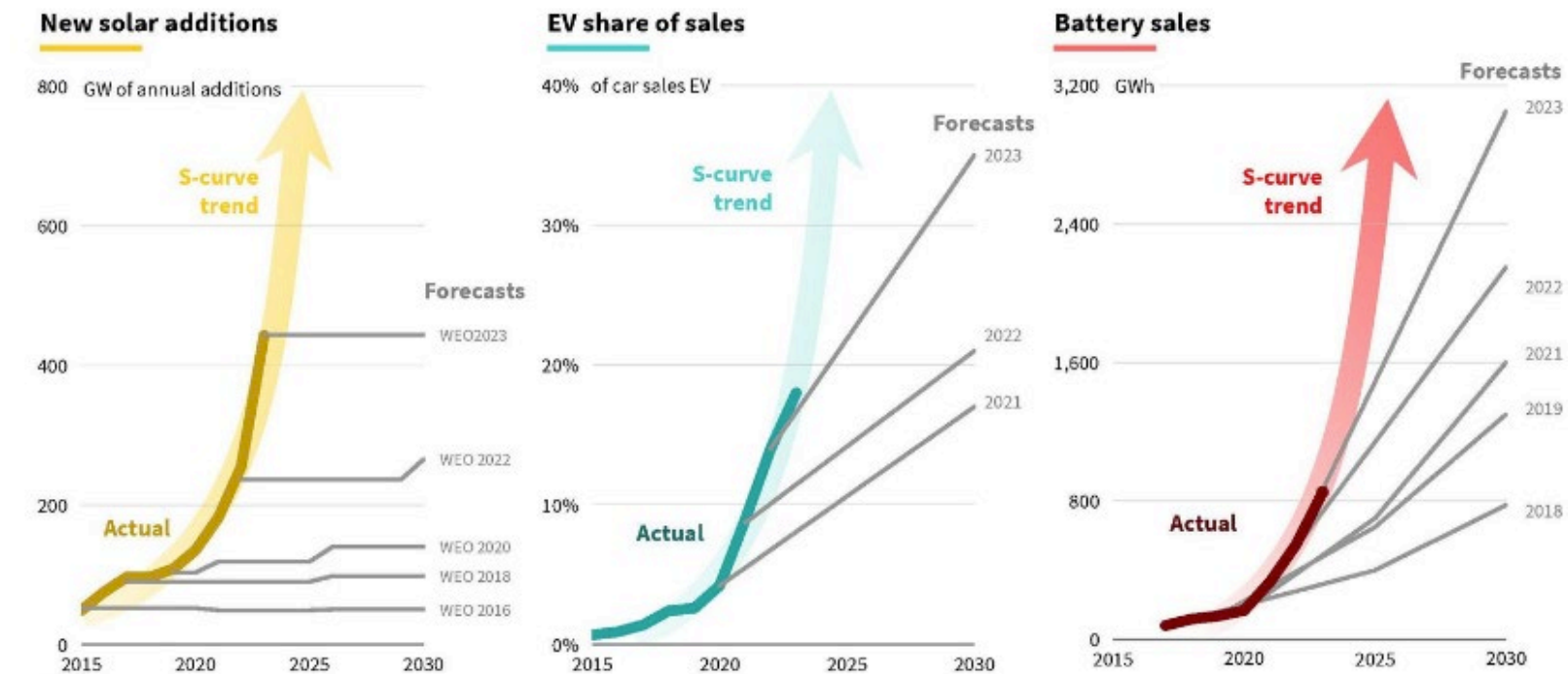
IEA. CC BY 4.0.

Source: IEA 2024

- Solar, wind, batteries and all with rapidly decreasing prices
- Energy storage: Enabling grid stability and 24/7 clean energy access



# Accelerating Paris Agreement target implementation through climate technologies in the MENA region













Source: BNEF , IEA steps

- Vast potential for clean electricity and desalination
- Total cost of ownership often lower than conventional technologies with fossil fuels, plus energy independence
- Energy efficiency, renewable, storage and electrification as key enablers



# Near Zero technology solutions exist accross all sector

Sectors	Share of global GHG emissions	Technological readiness of decarbonisation solutions		
		Pilot (TRL 5)	Demonstrator (TRL 7)	Full-Scale Commercial (TRL 9)
 Clean Hydrogen	n.a.			Electrolysers, SMR/ATR + CCS
 Buildings	28%			Residential Heat Pumps, Electric Boilers
 Light Industry	13%		Thermal Energy Storage	Industrial Heat Pumps
 Aviation	2%	Hydrogen, Battery Aircraft Power-to-Liquid SAF	Non-HEFA Biofuels	HEFA Biofuels
 Trucking	2%		Hydrogen Heavy Trucks	Battery Electric Mid/ Heavy Trucks
 Steel	7%		H <sub>2</sub> -based DRI-EAF, BF-BOF + CCS, Smelting Reduction + CCS	EAF, Electrolysis-EAF, Electrowinning-EAF
 Aluminium	2%	Electric Calcination, Hydrogen Calcination	Inert Anodes, MVR	Electric Boilers, Hydrogen Boilers
 Ammonia	2%		Methane Pyrolysis	Electrolysis, Methane Reformer + CCUS, Methane Pyrolysis
 Cement / Concrete	8%	Alternative Chemistries	Carbon Mineralisation	CCS, Industrial & Biomass Wastes
 Shipping	3%	Ammonia- and Methanol-native Vessels		Ammonia- and Methanol-ready Vessels

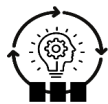
Source: energy transition commission 2024





# Technology Mechanism Joint Work Programme (2023-2027)

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National Systems of Innovation



Water-Energy-Food systems



Energy systems



Technology roadmaps



Buildings and resilient infrastructure



Business and Industry



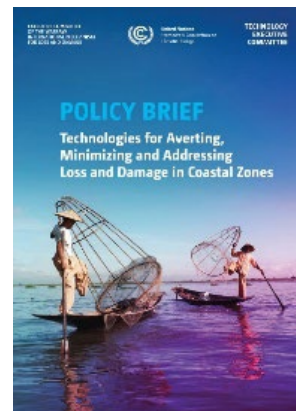
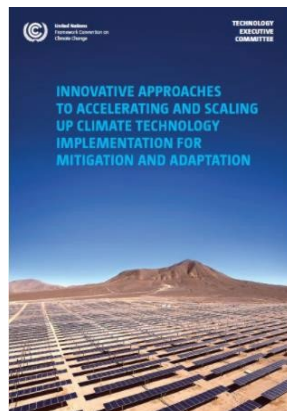
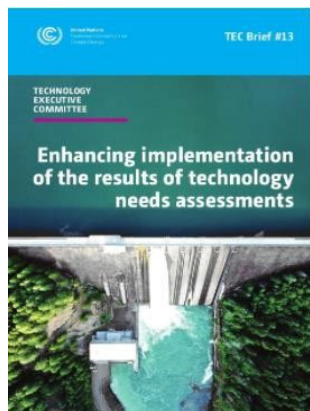
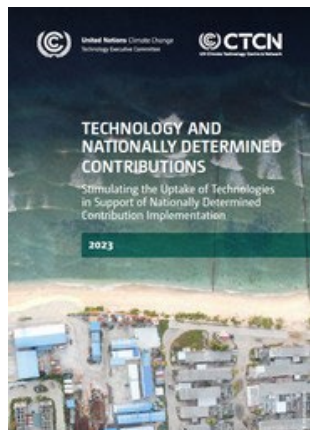
Technology Needs Assessment



Digitalization

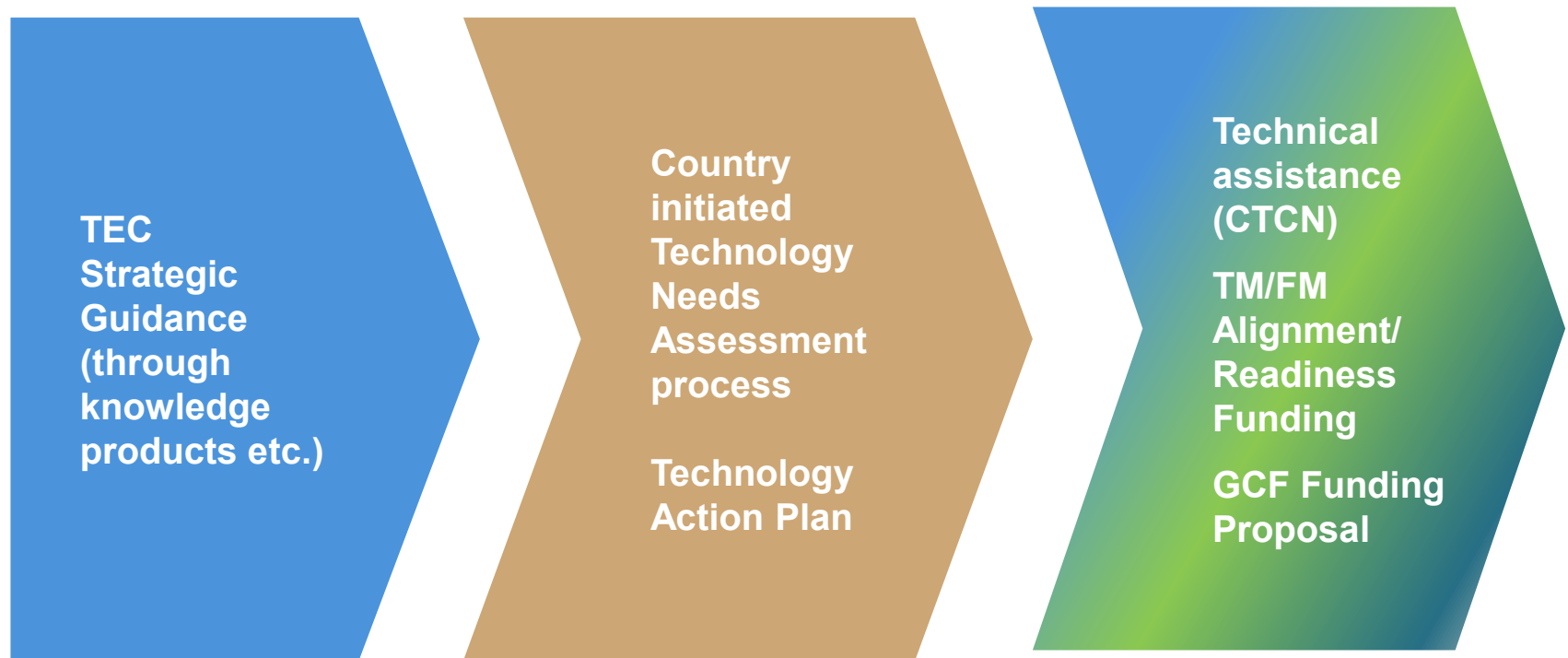


# Technology Mechanism Joint Work Programme (2023-2027)



# Bridging Technology Needs and Climate Finance

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- Critical roles of Technology and Financial Mechanism to systematically and strategically develop clean technologies and adaptation solutions based on country needs
- Collaboration between Technology Mechanism (CTCN) and GCF in 2017: “....From today, developing countries will have stronger technology and financial backing to help meet their commitments to the Paris Agreement on Climate Change”





## Technology and finance as key enablers

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**Let us empower climate action through uniting technology and finance to accelerate the clean energy transition**

