



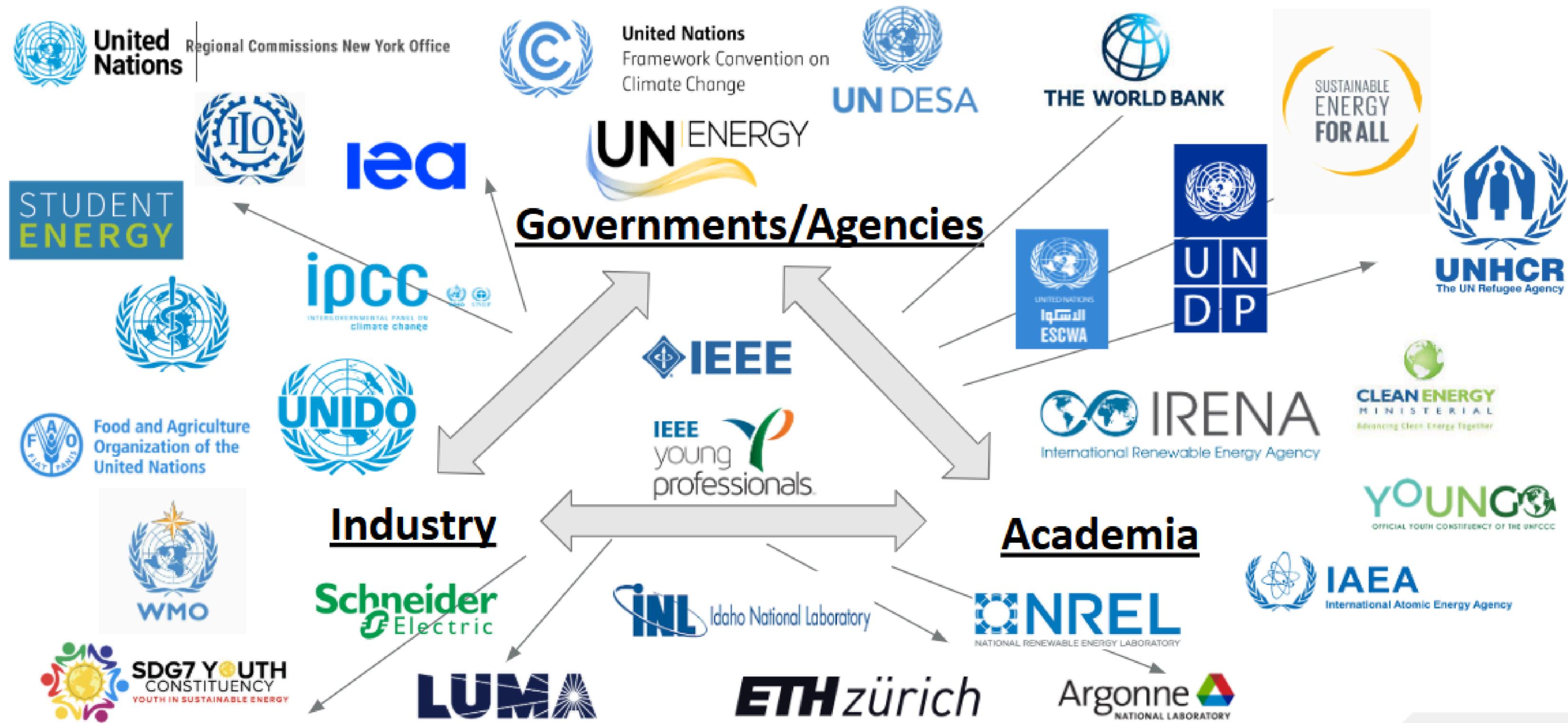
# Unifying Forces: A Multi-Sector Approach to Clean Energy

Presented by: Shaibu Ibrahim, CSSC Coms. Lead

**October 28, 2025**



# Global ecosystem for Climate and Sustainability



# United Nations Climate Change Conference (COP29): Leadership of High Level sessions and collaboration with the World Bank



COP29  
Baku  
Azerbaijan



IEEE  
youngprofessionals  
Climate and Sustainability Task Force

IEEE YP Climate and Sustainability Task Force  
DELEGATION TO COP29, BAKU



Mr. Josh Oxby  
IEEE representative to YOUNGO



Dr. Sneha Satish Hegde  
Partnerships Lead, IEEE YP CSTF



Dr. Sajith Wijesuriya  
Chair, IEEE YP CSTF



Ms. Yuhan Zheng  
Programs Lead, IEEE YP CSTF



Timothy Asare  
Member, IEEE Climate Change Group



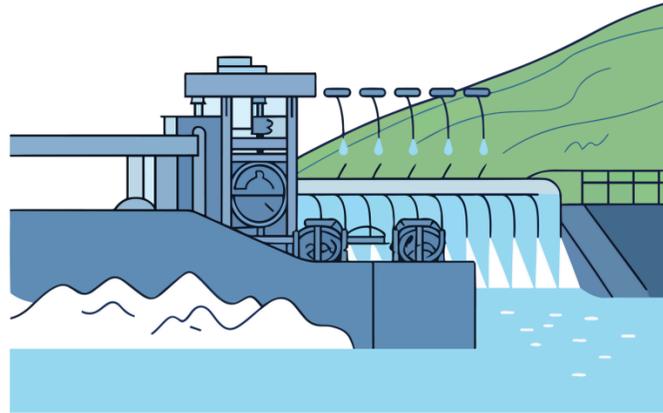
# Unifying Forces: A Multi-Sector Approach to Clean Energy

**CLEAN ENERGY**

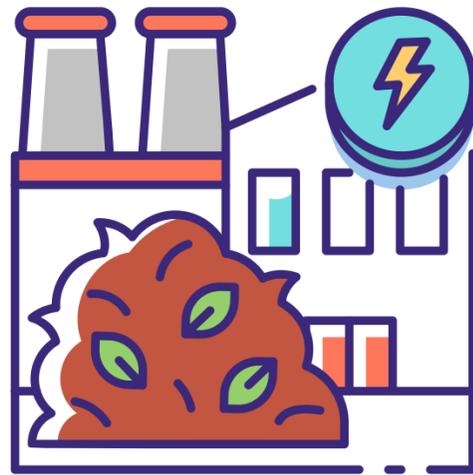
Technology is available

but

Technology is not enough



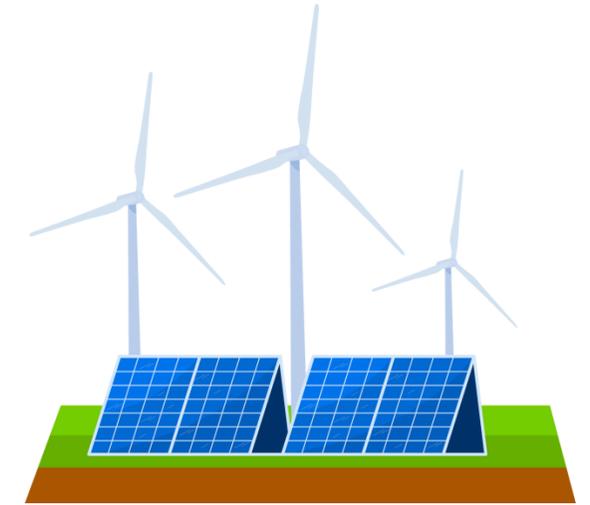
Hydropower



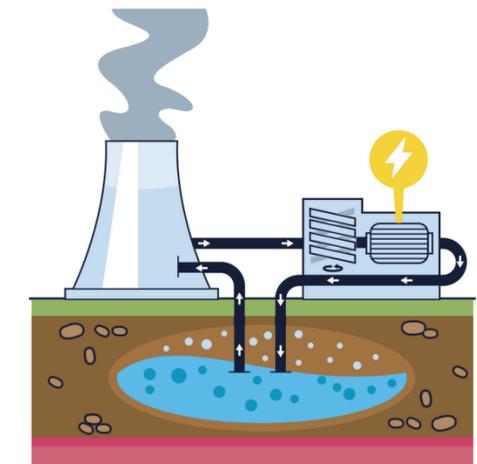
Biomass and biogas



Nuclear Power



Solar Photovoltaic (PV) & wind



Geothermal

# Outstanding issues to care about



Almost 750 million still lack access to electricity especially in developing nations

IEA, 2024

Geopolitics and market barriers



Global electricity demand is set to grow about 25-30% according to IEA, 2024



Technology and infrastructure gaps



Inadequate financing and investment

# No Single Sector or Technology can achieve a clean energy transition

SL.

Energy and Power

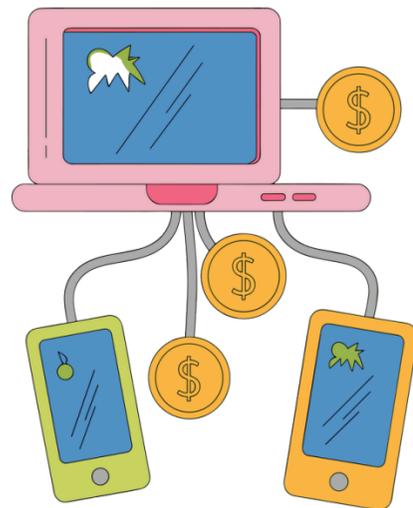


Transportation

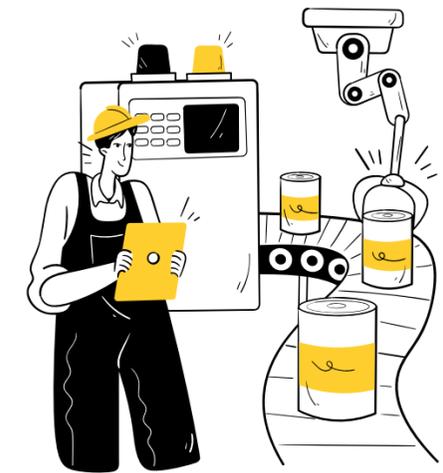


Building and cities

Finance



Agriculture



Manufacturing

Local authorities having jurisdiction

SL.

# Leverage Public-Private Partnership

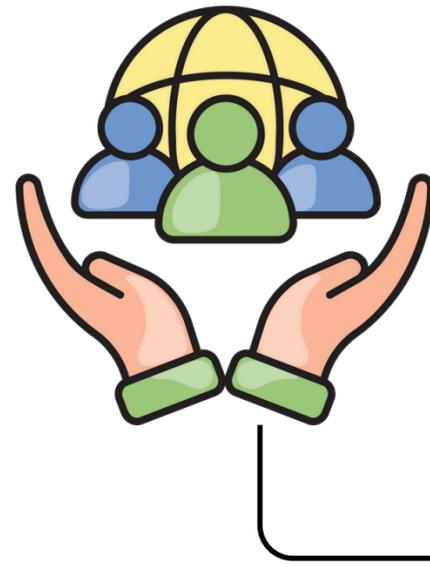
SL.

IRENA calls for **\$5.7 trillion annual clean-energy investment**, with stronger multi-sector financing mechanisms.

IRENA (2024), World Energy Transitions Outlook

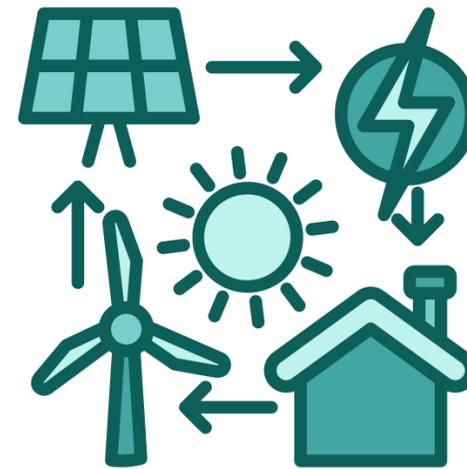


**huge financial burden**



**The public sector provides:**

- policy support
- regulatory stability



**Utilities & academia**  
technical performance  
grid reliability



**The private sector contributes**

- capital
- innovation
- productivity
- efficiency

# Use Case of Multi-Sector Approach



## United States

DOE Grid Modernization Initiative  
(GMI)

Combines utilities, tech firms, and AI companies to create a resilient grid.

Encourages public-private partnerships for smart infrastructure.



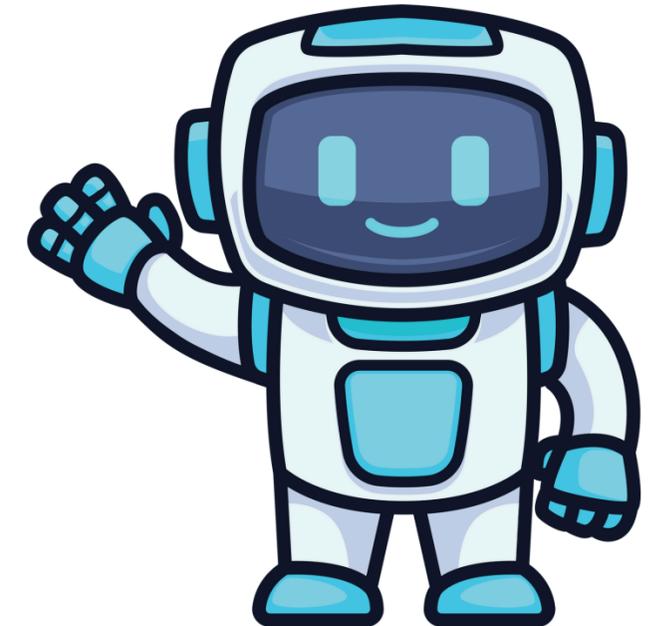
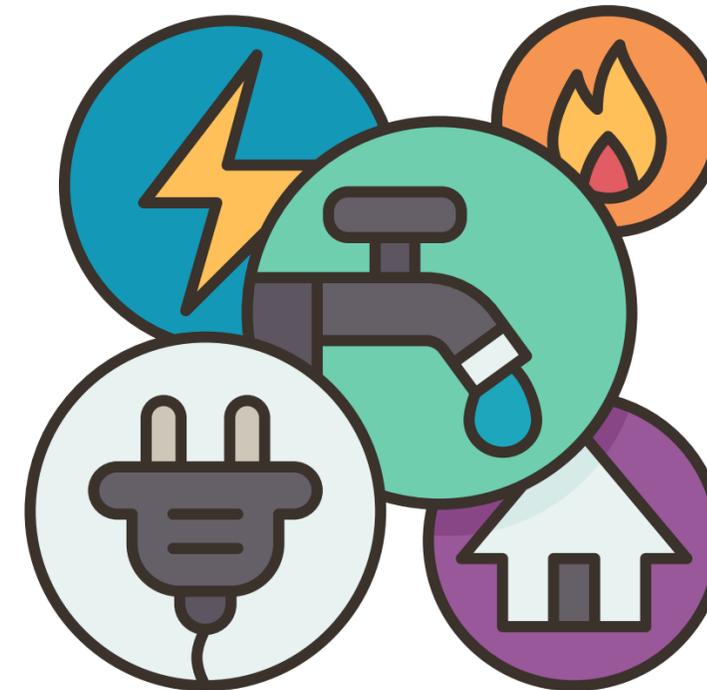
**Several National labs**

**Leading energy companies**

**Universities**

**Regulatory organizations**

\$220 million over 3 years for critical research



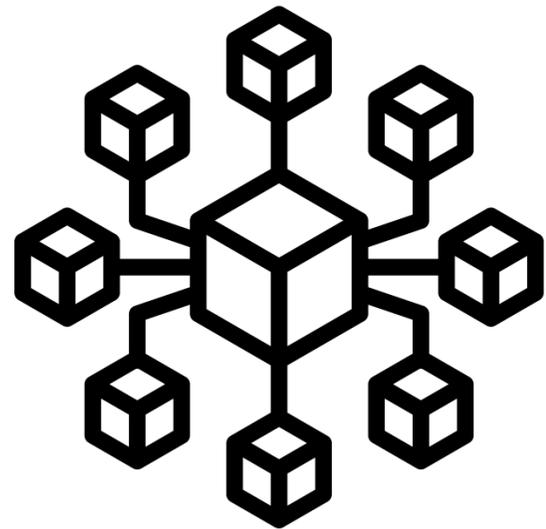
# A multi-sector approach looks out for:



**collaboration**

instead of

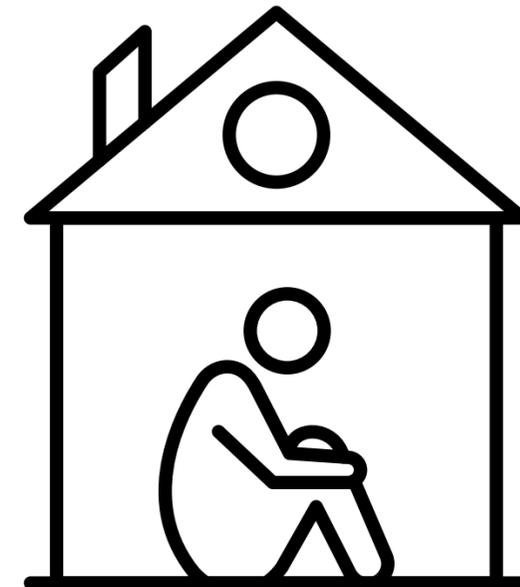
**competition**



**integration**

instead of

**isolation**



# From International Energy Agency (IEA)

“The transition to clean energy is happening worldwide and it’s **unstoppable**. It’s not a question of ‘if’, it’s just a matter of ‘how soon’ – and the sooner the better for all of us,” said **IEA Executive Director Fatih Birol**.

“Governments, companies and investors need to get behind clean energy transitions rather than hindering them.”



**Students  
Community**



**Global  
Community**



**Global  
Volunteer Pool**

**Scan to Join the WhatsApp Groups**

**Contact: [yp-cstf@ieee.org](mailto:yp-cstf@ieee.org)**

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THANK YOU

