

**Co-creation towards  
Carbon Neutrality**

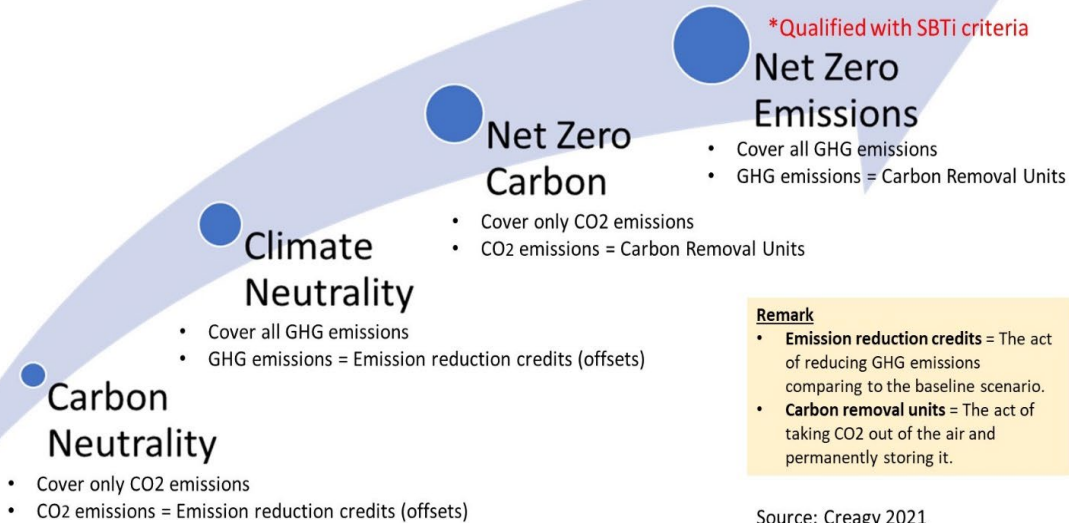
**W**orkforce **D**evelopment and **C**apacity-  
**B**uilding Partnership to Support Carbon  
Neutral Transition in Thailand and SEA

**WDCB**

# Global Climate Crisis & the Race to Net-zero



## Pathway to Net Zero Emissions Targets



Source: Creagy 2021

- Global temperature will stabilise at 1.5 °C when CO2 emissions reach net zero carbon by early 2050s (IPCC)
- Growing number of countries, local governments, and corporations are making commitments to achieve carbon neutrality
- “Climate emergency is a race we are losing, but it is a race we can win” – UN Secretary General

# Carbon Neutrality Goal

Transition to low-carbon energy, economy & society requires:



**Fundamental transformations in all aspects of energy systems, technology, and business models, particularly by:**

- Decarbonizing the power sector by shifting away from fossil fuels and expanding support for renewables and making power more reliable and more accessible for consumers & prosumers
- Scaling up energy efficiency
- Reducing carbon footprint (greenhouse gas) in the consumption and production of products and services, and
- Promoting BCG economy through increase bioresource efficiency and utilization and improve sustainable materials management
- As well as building adaptation and resilience capacities of all public, private and community actors

# Thailand's Carbon Neutral Transition Strategy



- Government recently announced CN target to be achieved in 2050 and net-zero GHG emissions by 2065
- A new energy transition plan to be set in 2022 will see:
  - The use of much higher percentage of RE (50% or higher)
  - Electrification of end use sectors, e.g. transport (electric vehicles), industry and building (Power to gas, heat, etc.)
  - Modernization of power sector to expand the use RE, use of flexibility resources and new business models



# Thailand's Carbon Neutral Transition Strategy



- BCG announced as a priority strategy at Ministerial Forum for Cooperation in the Indo-Pacific @Paris (22 Feb 22)
- More and more corporations are committing to achieve CN targets and requesting technical assistance, e.g. livestock and feed mill production industries
- Carbon pricing and carbon trading important policy tools

# Reskilling & Workforce Development Needs

## Example in EU

- Reaching net-zero could require skills training for up to 18m workers
- Expect to see 3.4 m new jobs by 2050 and 2.1 m job losses in sectors directly impacted by transition
- Reskilling or upskilling and life-long learning needed to keep up with rapid technology change
- New “green jobs” in the development/deployment of advanced climate friendly technologies
- Designing and implementing policies, as well as managing the transition process

McKinsey  
& Company

## Net-Zero Europe

Decarbonization pathways and  
socioeconomic implications



# Reskilling & Workforce Development Needs (cont'd)



- Thus, better quality and high-level skills workforce needed for the above tasks
- **Governments have to create dedicated training programs for new skills for companies, local and national government agencies**
- Must also ensure a “just transition” (benefits of transition shared by all and no one left behind)

The logo for WDCB, consisting of the letters 'WDCB' in white on a dark blue rectangular background.

WDCB

Program  
Objective

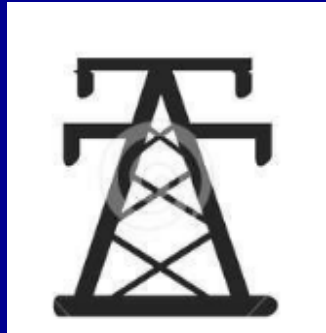


To support rapid low-carbon transition in Thailand and in selected SEA countries through coordinated and targeted workforce development and capacity building programs for government agencies (local & national), industry and businesses



# 6 Strategic Priority Sectors

WDCB



Transformative Power Systems & Non-bio Renewable Energy



Sustainable Bioenergy & Biorefinery



Energy Efficiency in Buildings, Industry & Transport



Air Quality and Climate Change Mitigation & Adaptation



Circular Economy & Sustainability

Transition Policy and Management

# 7 Action Pillars

WDCB

(First year proposal covers pillars 2, 5 and 6 only, and partly Pillar 7)

Workforce Development: Master & PhD



1

Upskilling/Reskilling



2

Entrepreneurship Development in E&E



3

Collaborative Research & Innovation



4

International Partnership



5

Industrial and Government Partnership



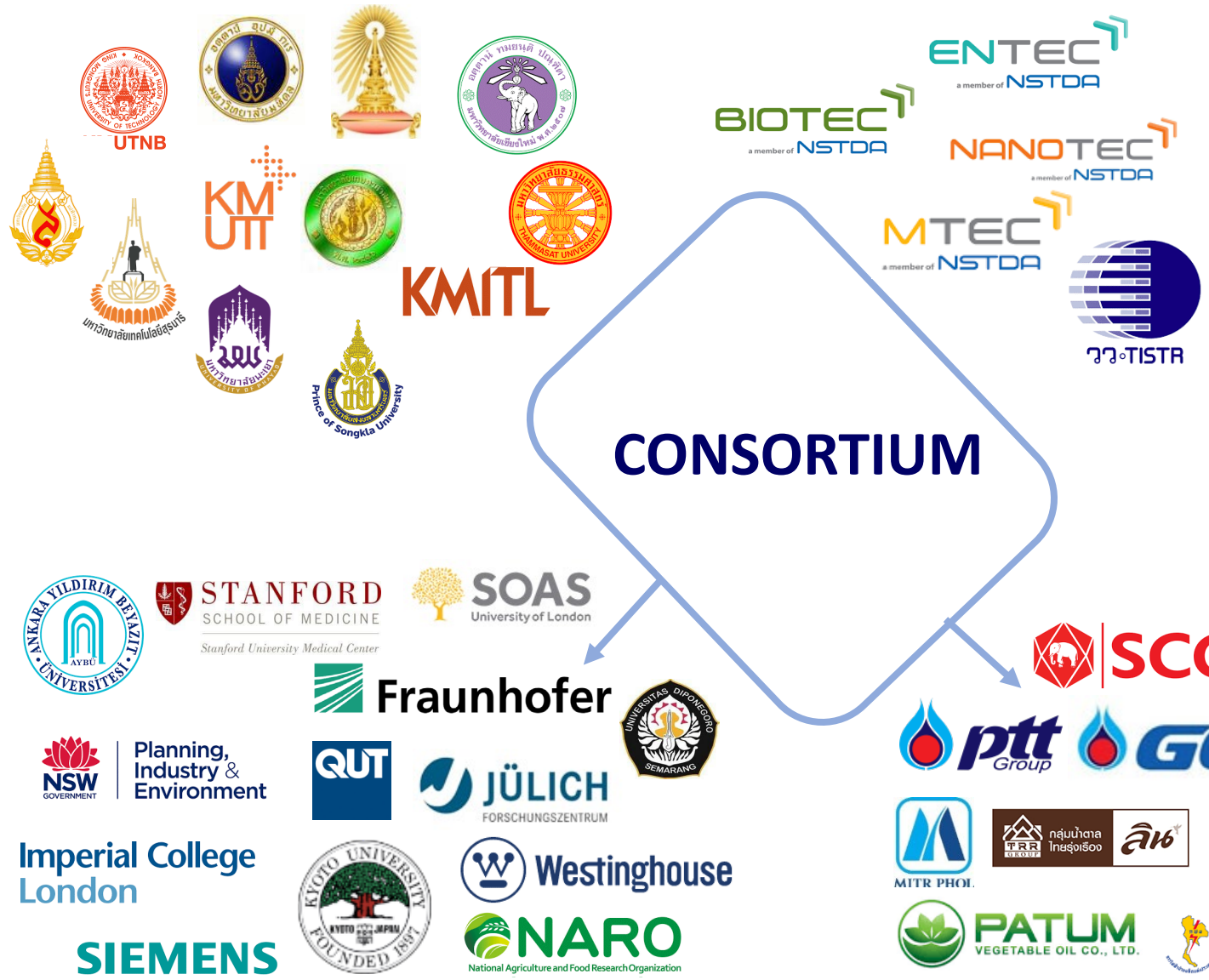
6

Capability Enhancement (Train-the-Trainers)

7

# Consortium to Support Net Zero GHG Emissions

Reaching Net Zero GHG Emissions by multi-disciplinary technologies



- Core areas**
- Transformative Power Systems
  - Sustainable Bioenergy & Biorefinery
  - Energy Efficiency
  - Circular Economy & Sustainability
  - Agricultural & Livestock

- Grant sources**
- UWA.
  - UWU.
  - giz
  - jica
  - Department of Alternative Energy Development and Efficiency MINISTRY OF ENERGY
  - ASEAN Centre for Energy One Community for Sustainable Energy



**ขอบคุณครับ**