Sustainability, supply and security: Vietnam's energy transition and its implications

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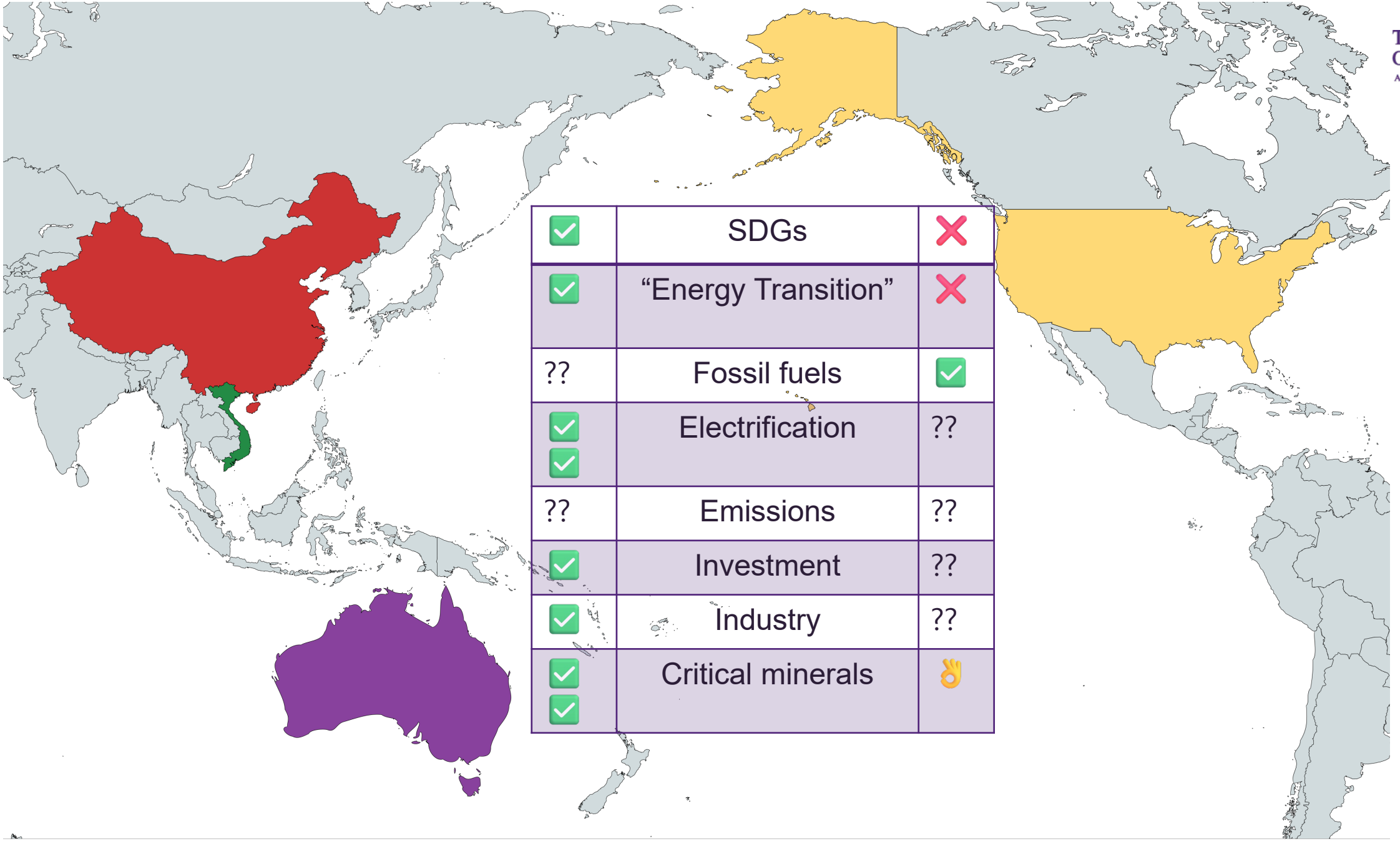

✅	SDGs	❌
✅	“Energy Transition”	❌
??	Fossil fuels	✅
✅ ✅	Electrification	??
??	Emissions	??
✅	Investment	??
✅	Industry	??
✅ ✅	Critical minerals	👌

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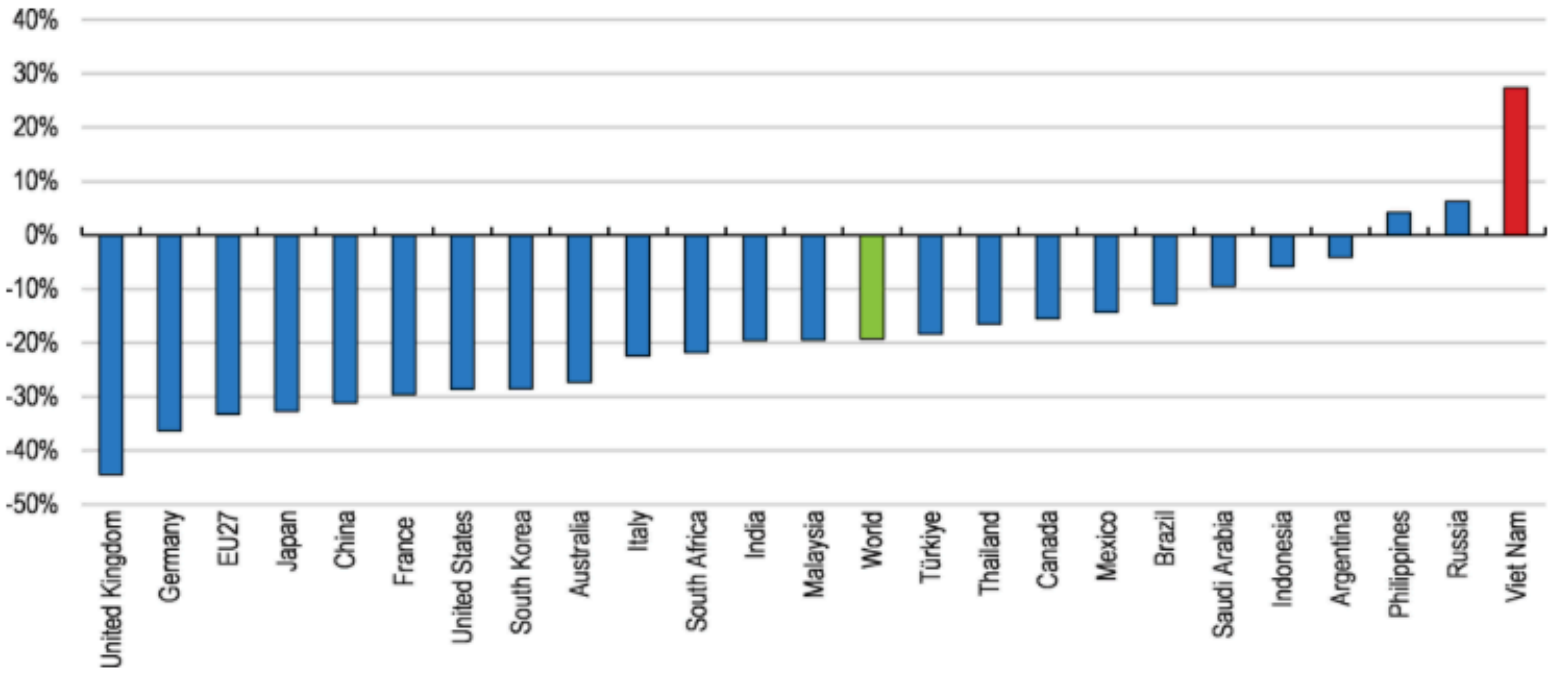
AUSTRALIA

- Growing population
- Growth in affluence (more individual transport, bigger houses, more appliances, per-capita GDP)
- More manufacturing for rising domestic consumption and exports
- Greater utilisation of fossil fuels to service above

Figure 3.4. CO_2 emission intensity is declining in many countries, but not in Viet Nam

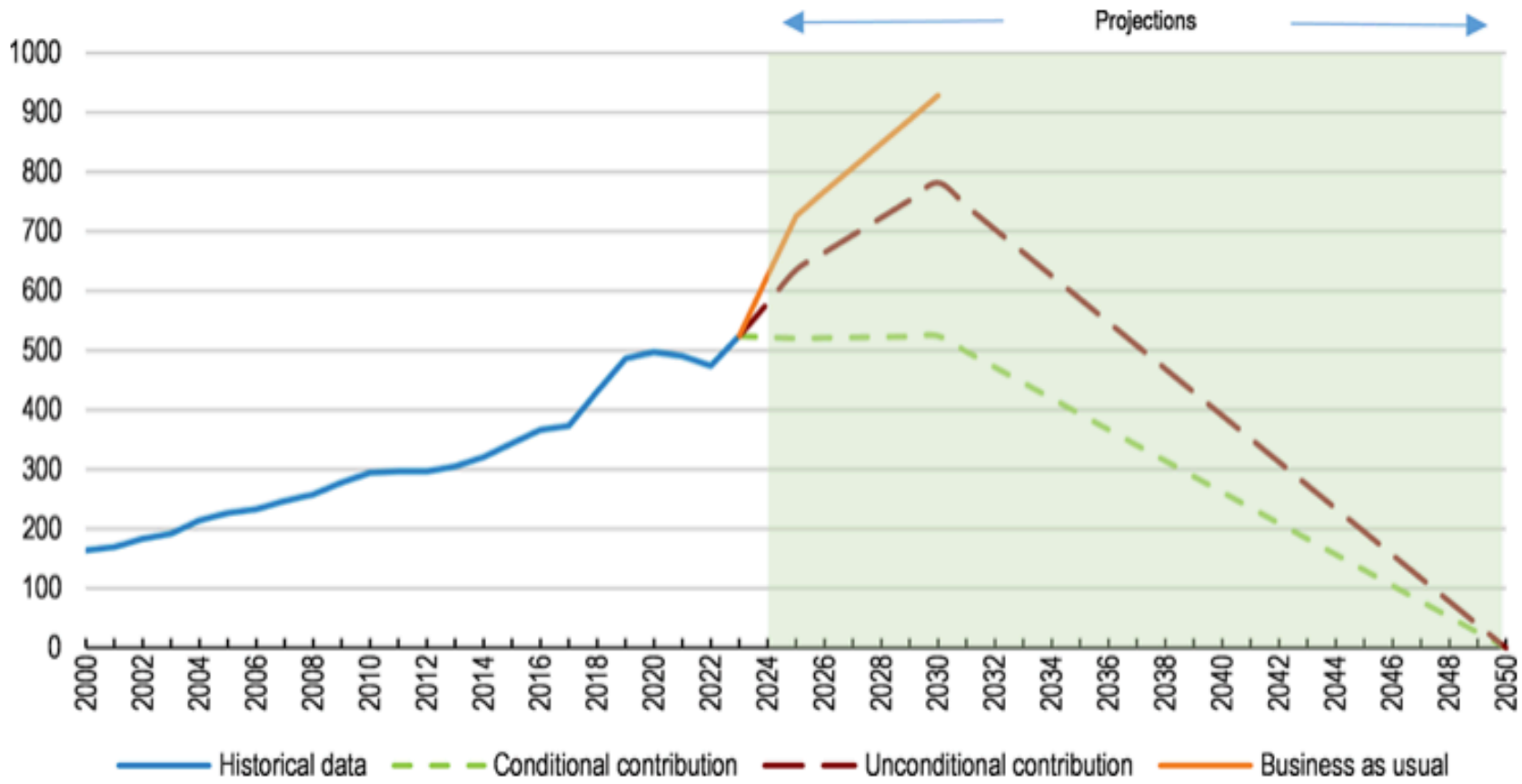
(Fossil CO_2 emissions per unit of GDP, change in % between 2013 and 2023)

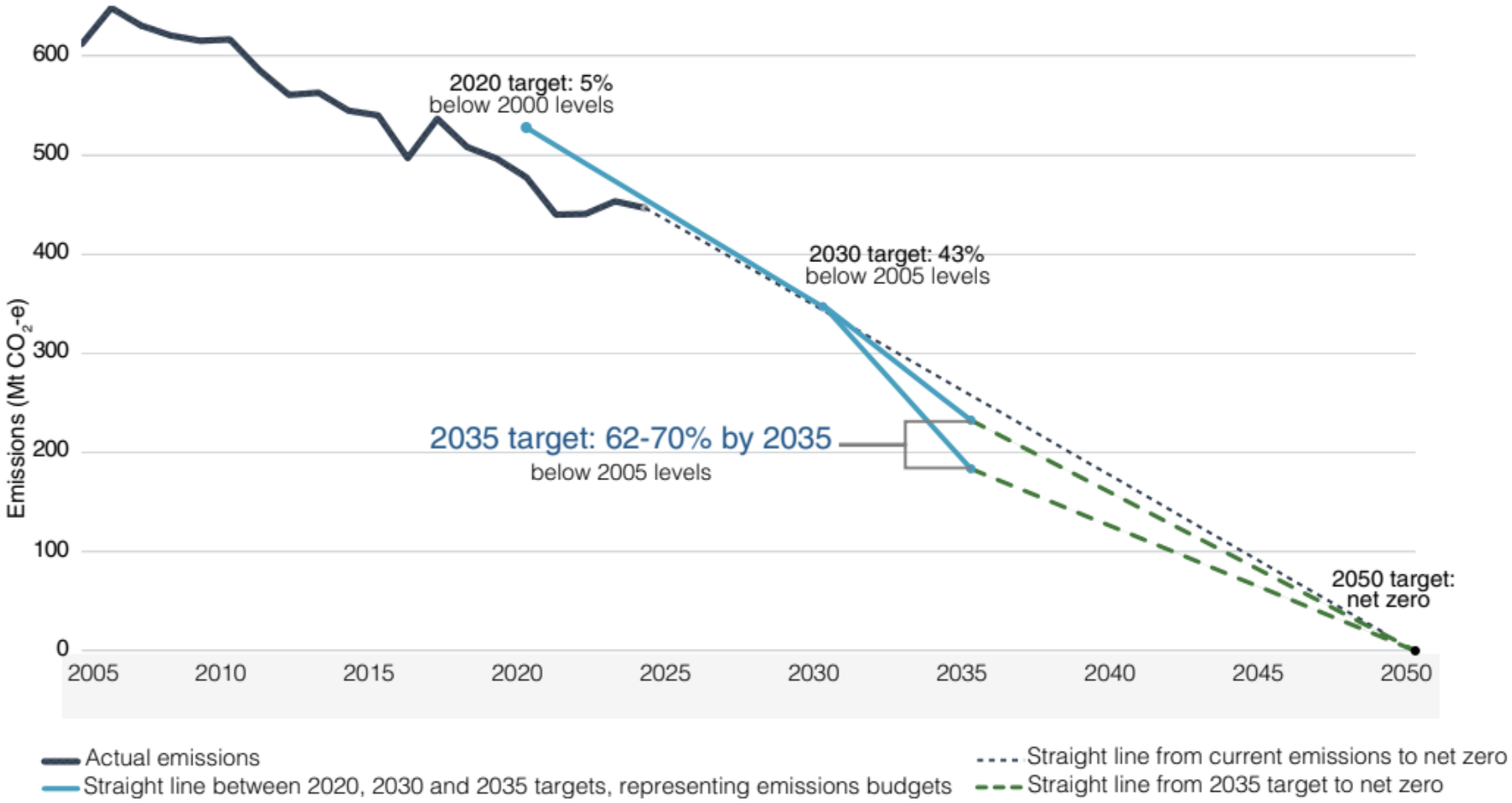


Source: Crippa et al., 2024.

Figure 3.1. Viet Nam's conditional pathway implies a lower carbon footprint

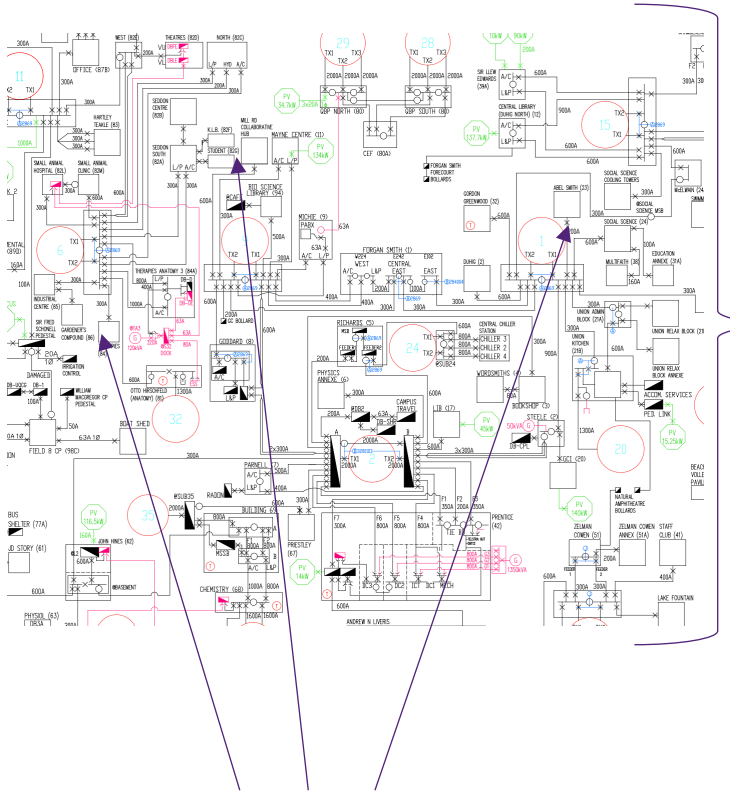
(in millions of tCO2eq GHG emissions)




600
500
400
300
200
100
0
Emissions (Mt CO_2-e)
2005
2010
2015
2020
2025
2030
2035
2040
2045
2050
2020 target: 5%
below 2000 levels
2030 target: 43%
below 2005 levels
2035 target: 62-70% by 2035
below 2005 levels
2050 target:
net zero
Actual emissions
Straight line between 2020, 2030 and 2035 targets, representing emissions budgets
Straight line from current emissions to net zero
Straight line from 2035 target to net zero

We have only one, increasingly complex, World

- Access to energy is an enabler of modern societies
- Provision of clean and affordable energy is a common goal of the Governments of Vietnam and Australia for the health and economic wellbeing of their citizens
- Technology can be a unifier but equity and prosperity are a collective responsibility of governments and NGOs with policies and actions that are culturally sensitive and environmentally sustainable
- A new workforce must be created
- Misinformation is rampant but can be countered through common education, transparency and trust.



System thinking…..

University-trained
- engineers,
- physical scientists
- environmental scientists
- social scientists
- economists
- lawyers

New and existing skilled trades such as electricians, administrators, community advocates