



Session 9: Workshop Debrief

Moderator:

Peter Boyd

Executive Fellow, Yale Center for Business and Environment

Intro + Caveat

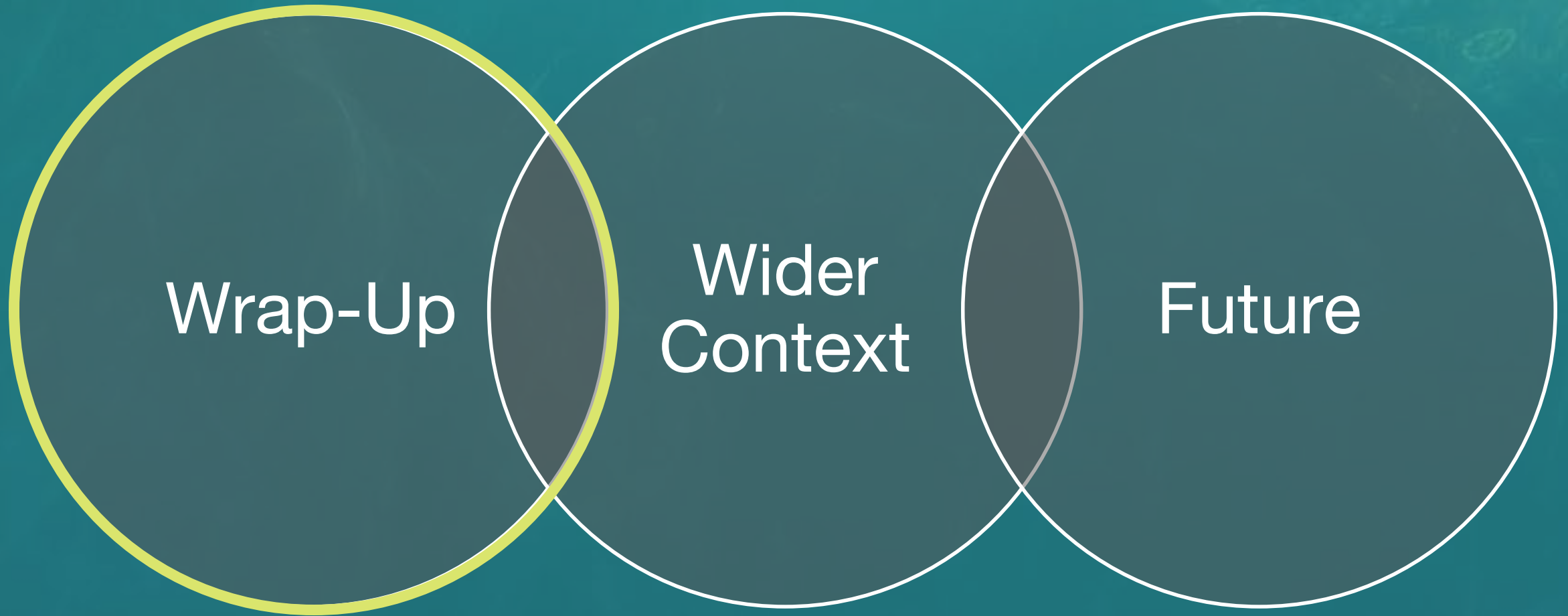
- *Private Sector* | Virgin Group inc. Virgin Mobile SA
 - *Non-Profit* | Carbon War Room, The B Team
 - *Government* | UK DECC - Chair EEDO
 - *Education* | Yale
-
- And a target residential customer



Purpose of next 45 min

1. Ensure your next day-at-the-office is different from your last
2. Make you feel (even) better about what you do through some observations and context from outside
3. Help think about the future together

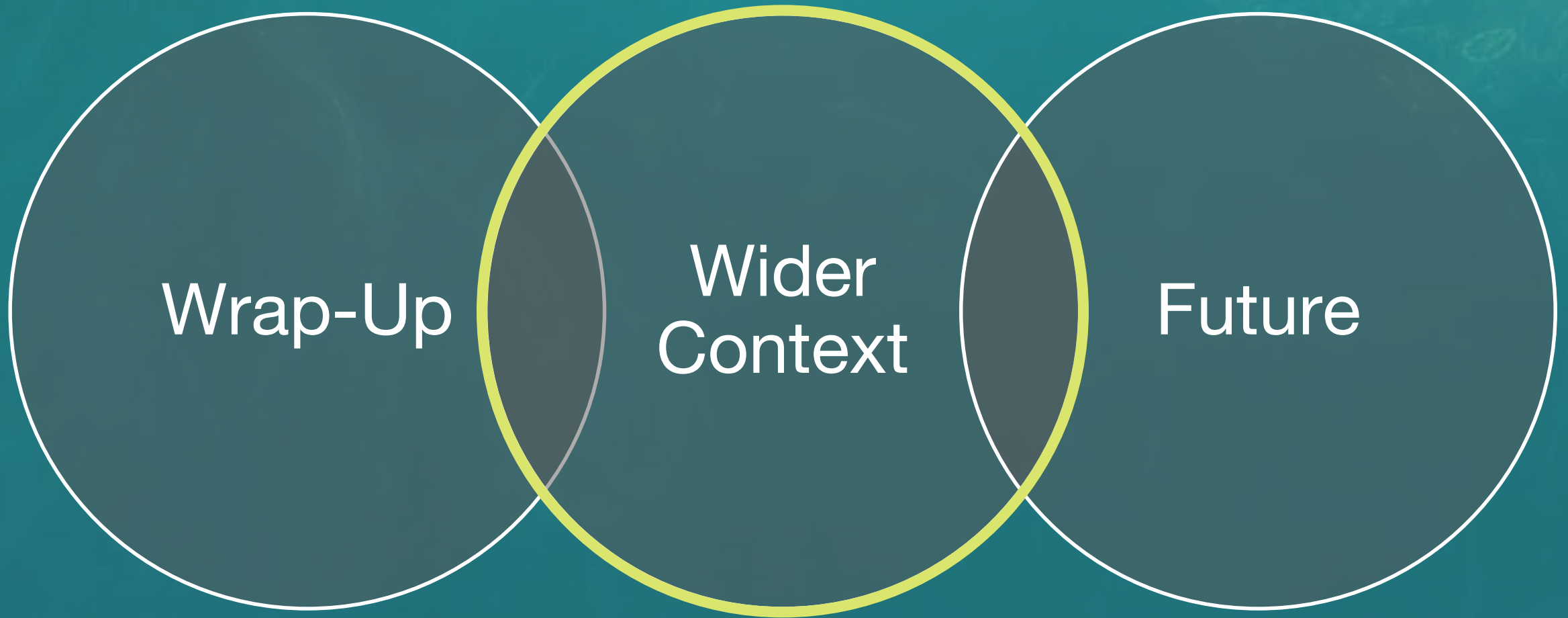
Flow



Debrief In Groups

1. What was particularly **useful / new / exciting / relevant**?
2. Examples of what you will be **doing differently** when you get back,
including new important key connections
3. What do you **need most help** with at regional+ level?

Flow



THE GREAT ACCELERATION

SOCIO-ECONOMIC TRENDS



EARTH SYSTEM TRENDS

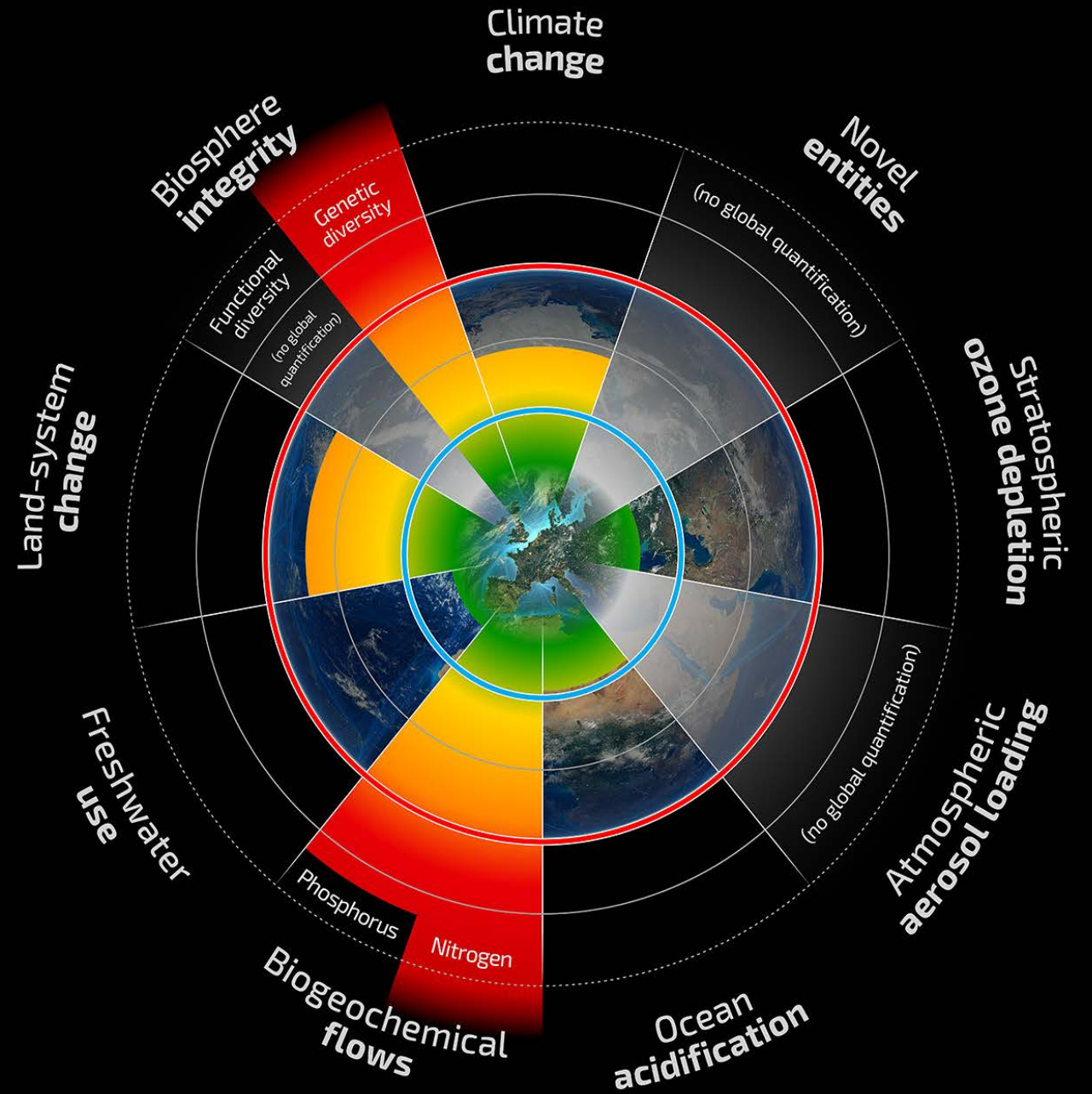


REFERENCE: Steffen, W., Broadgate, L., Deutsch, O., Gaffney and C. Ludwig (2015), The Trajectory of the Anthropocene: the Great Acceleration, Submitted to *The Anthropocene Review*.

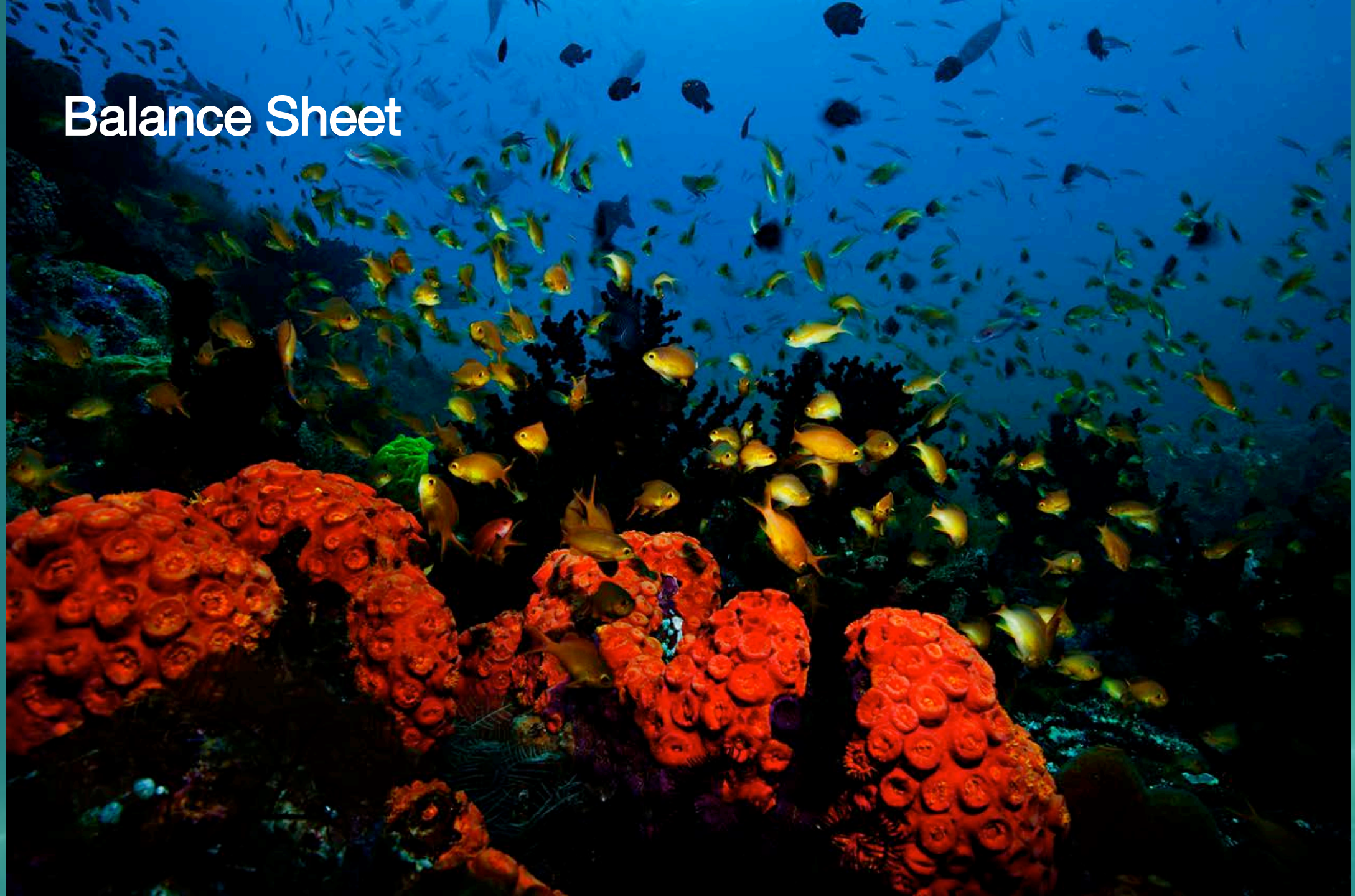
MAP & DESIGN: Félix Pharand-Deschênes / Globaia

Planetary Boundaries

Source: Steffen et al. Johan Rockström et al. Stockholm Resilience Centre
Google "Planetary Boundaries" "The Guardian Anthropocene"



Balance Sheet



Balance Sheet

2015 | UNFCCC | Net-Zero Emissions



Article 2

1. This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:
 - (a) Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;
 - (b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production;
 - (c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.
2. This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

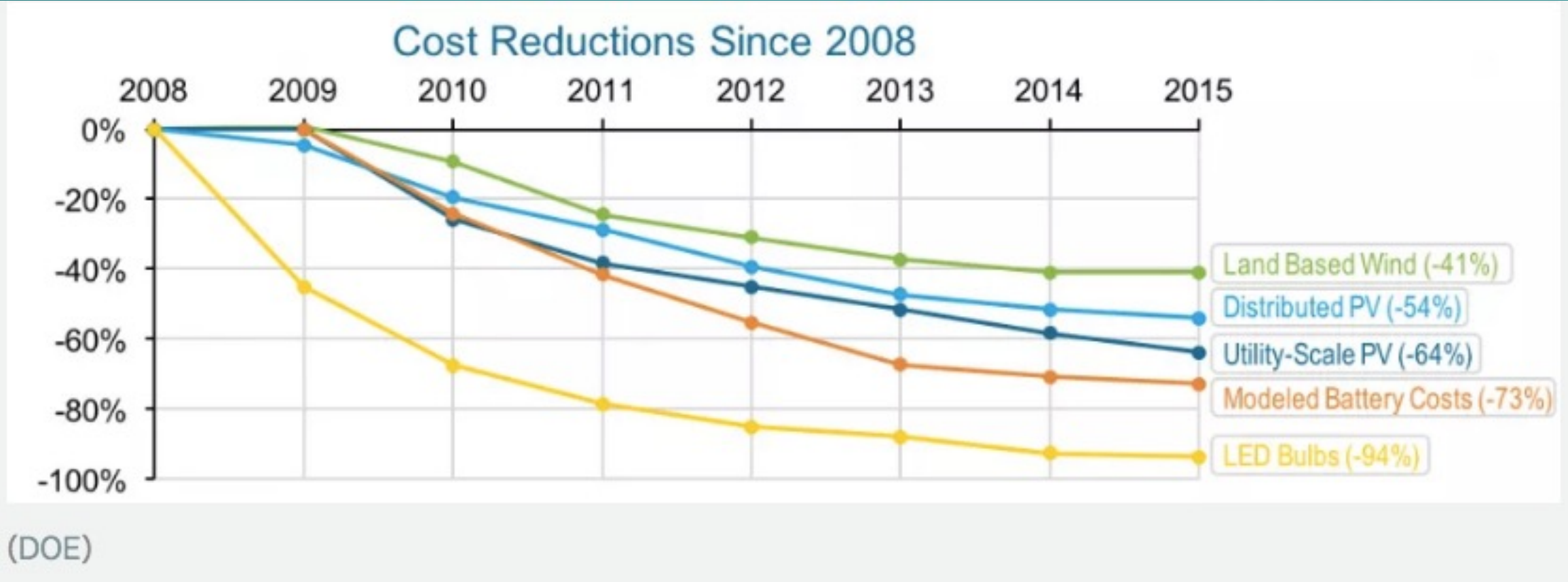
Article 4

1. In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty.
2. Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.

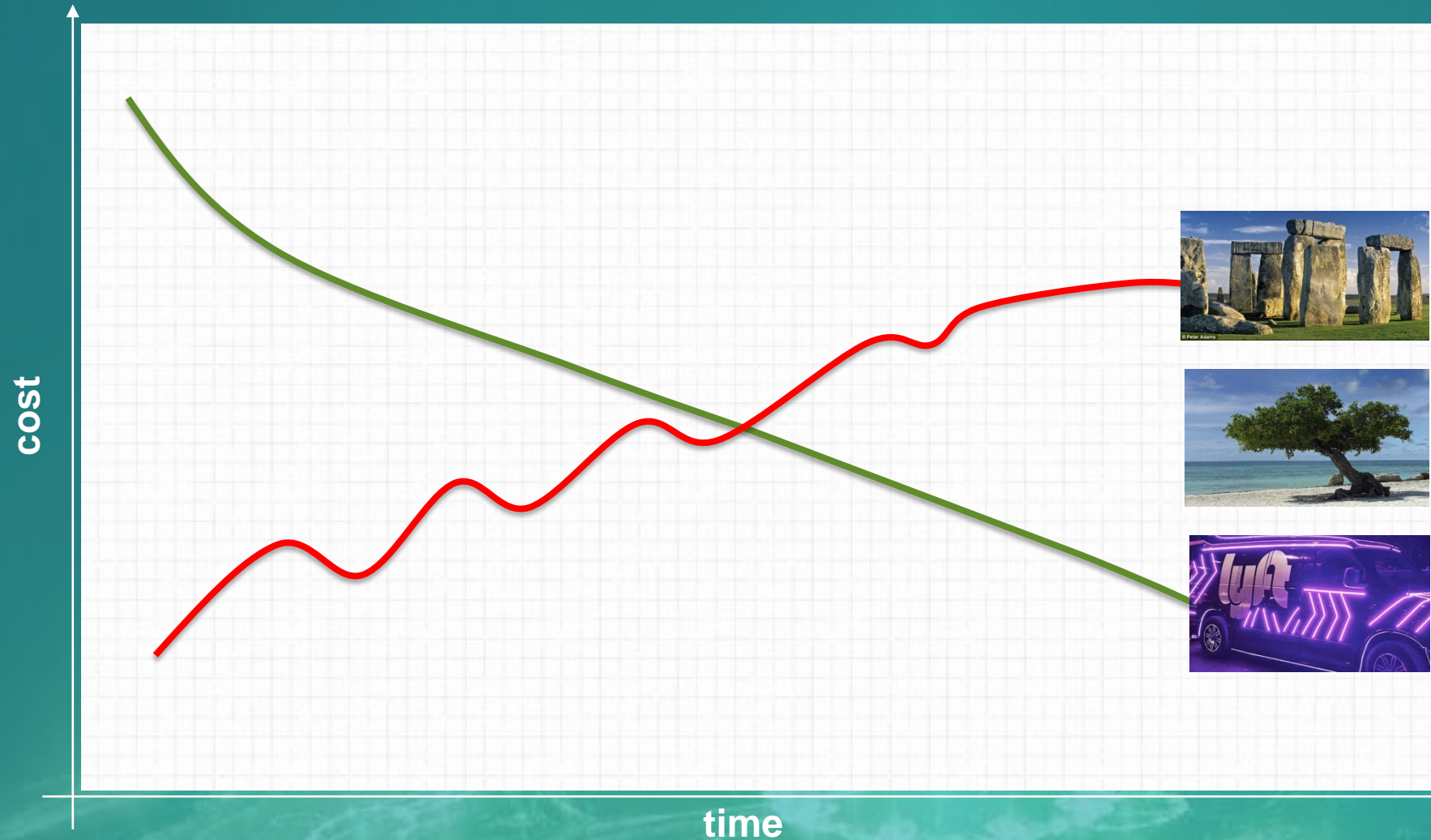
2015 | UN SDGs | Zero Poverty



Fundamentals - Clean Is Tech Not Fuel

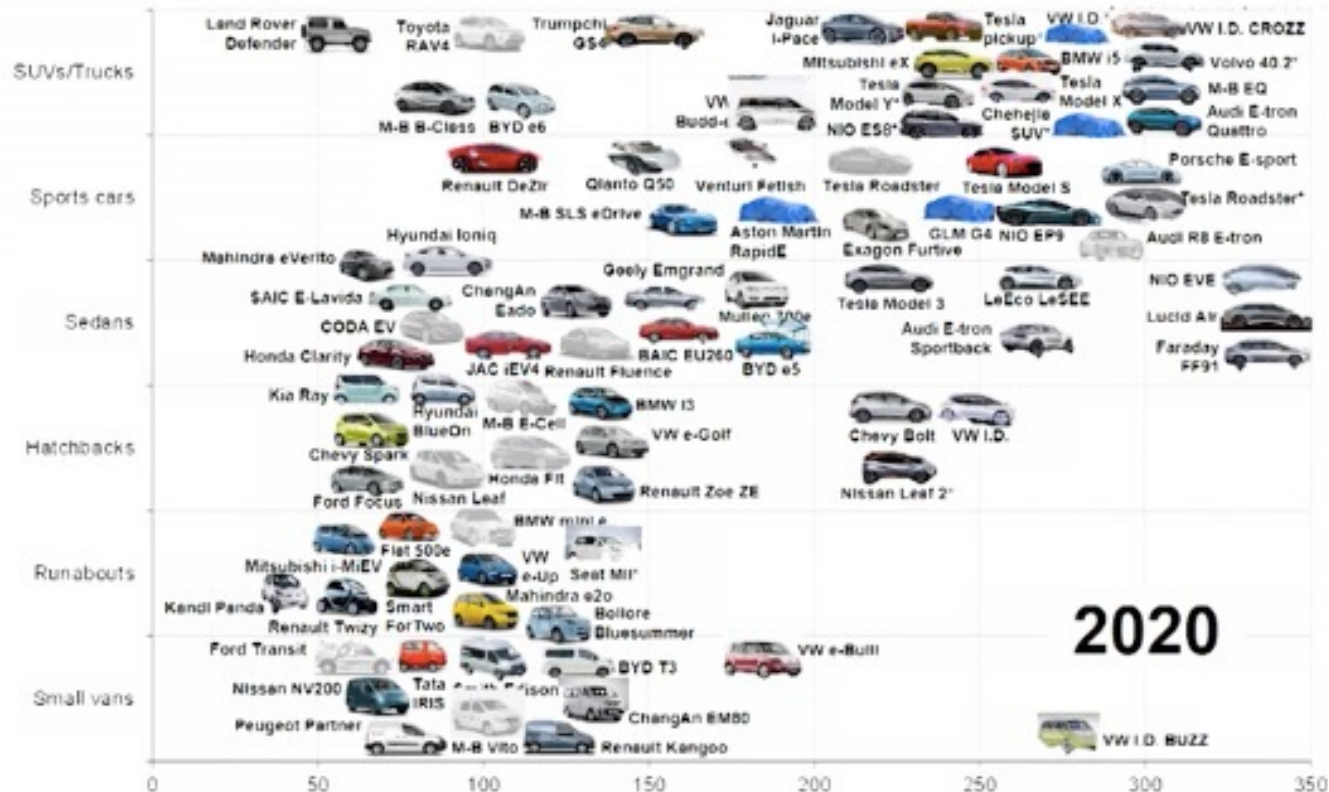


Solving Climate Change - One Page, Two Lines



Disruptive change after the crossover

BEV model availability, 2008-20



Li-Ion 73% down since 2008

Li-Ion to fall another 75% by 2030

Source: Bloomberg New Energy Finance. Images various. Notes: Not a forecast. () Future is speculated

The Courage To Regulate

Powering Your World

These countries want to ditch gas and diesel cars

Britain: The U.K. said Wednesday that it would ban sales of new gasoline and diesel cars starting in 2040 as part of a bid to clean up the country's air.

By 2050, all cars on the road will need to have zero emissions.

France: The government announced earlier this month that it wants to end sales of [gas and diesel-powered vehicles](#) by 2040 as it fights global warming.

India: New Delhi said earlier this year that every vehicle sold in the country should be powered by electricity by 2030.

Norway: The government's transportation plan outlines a clear target: All new passenger cars and vans sold in 2025 should be zero-emission vehicles.

The others: At least 10 other countries have electric car sales targets in place, according to the International Energy Agency.

Austria, China, Denmark, Germany, Ireland, Japan, the Netherlands, Portugal, Korea and Spain have set official targets for electric car sales. The United States doesn't have a federal policy, but at least eight states have set out goals.

South China Morning Post EDITION: INTERNATIONAL MON SEP 11, 2017 | JOBS | E

POLICIES & POLITICS

CHINA HK ASIA WORLD COMMENT BUSINESS TECH LIFE CULTURE SPORT WEEK IN ASIA POST MAG STYLE .TV

Your driver is arriving now. But who's behind your on demand journey? The answer is [Us](#)

News / China / Policies & Politics

Why Beijing's plan to stop producing petrol and diesel cars could be a game-changer for the industry?

Authorities study timetable to put brakes on fossil-fuel vehicles in race to cut emissions and pollution

PUBLISHED : Saturday, 09 September, 2017, 8:22pm
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COMMENTS: 31



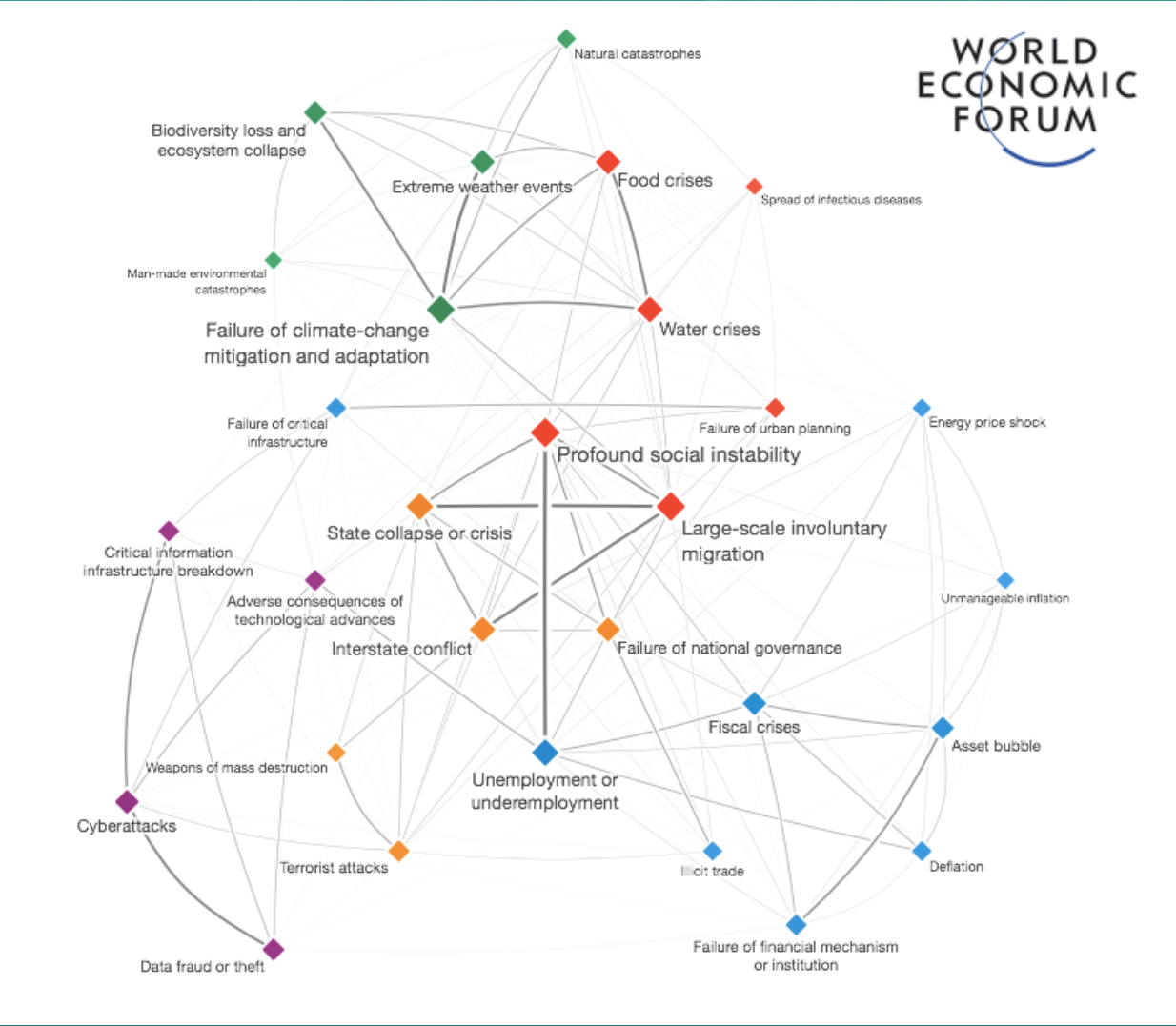
 China is working on a timetable to stop production and sales of fossil-fuel vehicles as it races to develop new-energy vehicles and clear the country's polluted skies, a senior Chinese industry official said on Saturday.

Wendy Wu

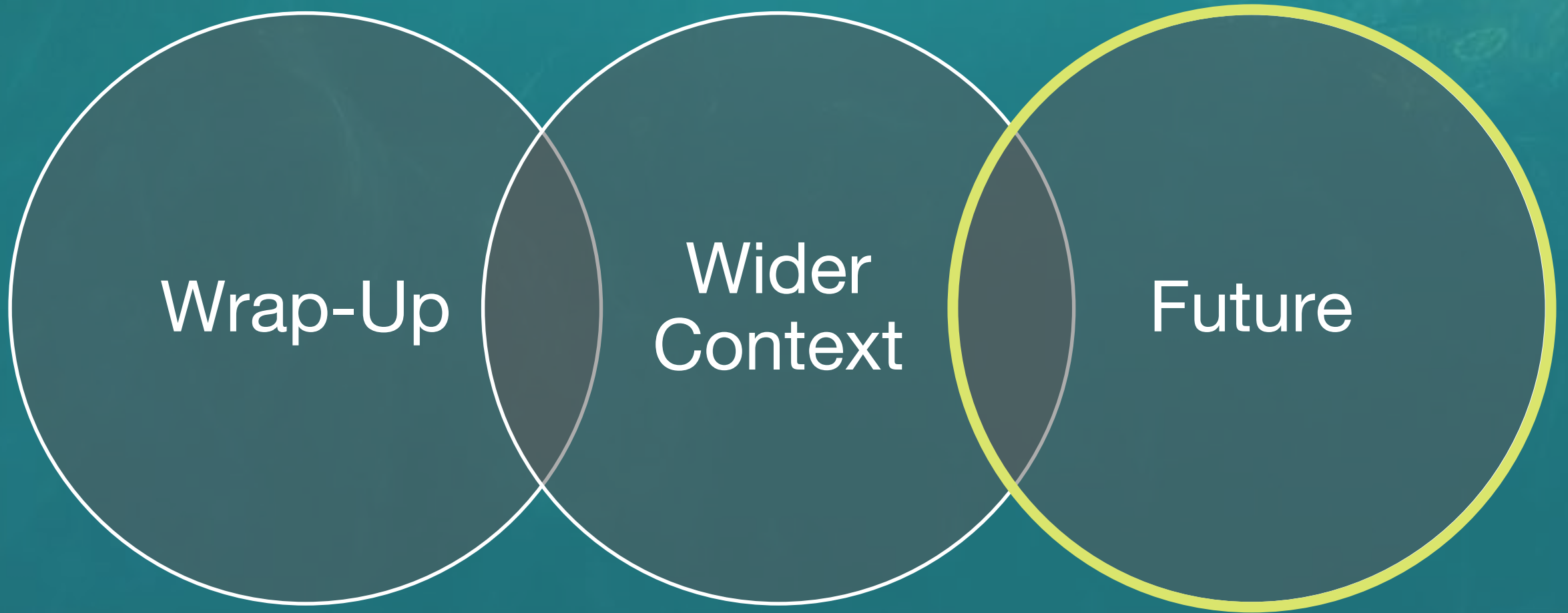
Think Big & Think Connected



“If a problem cannot be solved, enlarge it.”
Dwight Eisenhower



Flow



Common Observations

- no silver bullet / silver buckshot;
no one-size-fits-all
- Know what your customers want
then deliver it collaborative way
- What about Policy ?
- Need more rebates...
- Consumer confusion / inertia



Common Life-stage

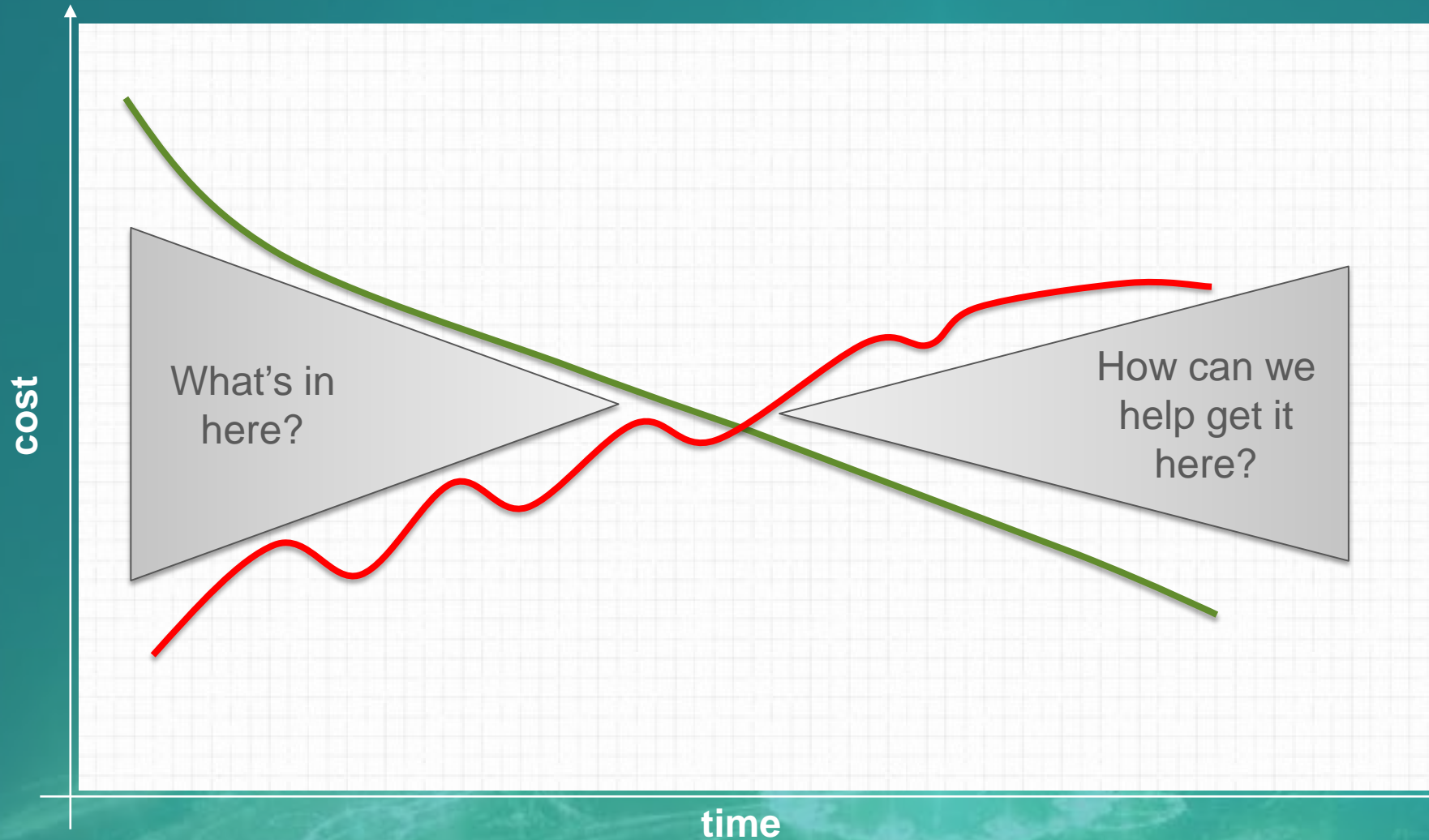
- Technology
- Installers
- Govt
- Developers
- Financiers
- Customers



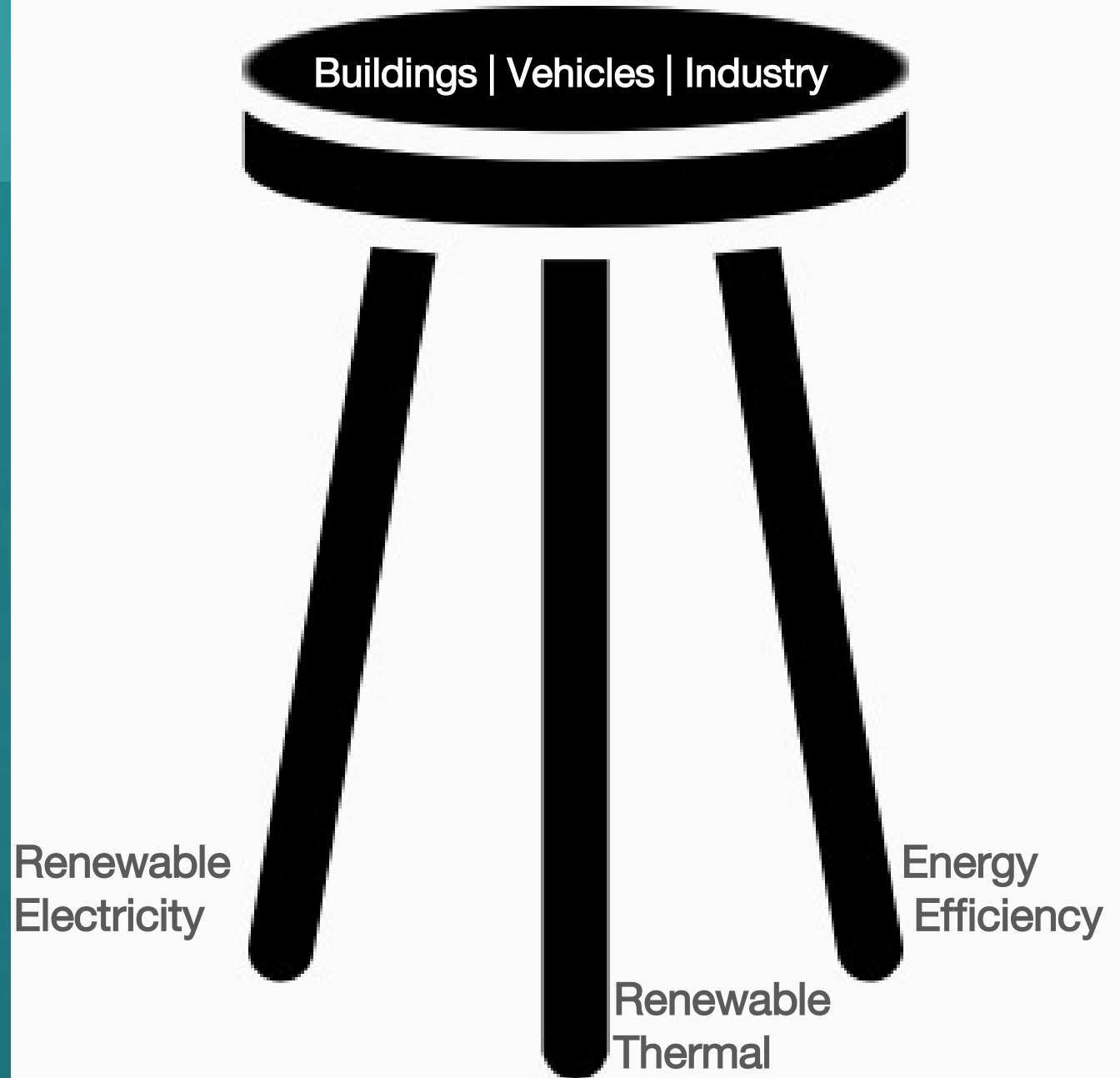
Unique Industry and Time?

- Complex sale (on surface)
- Strong targets at municipal, corporate, state level
- Technology coming of age
- Service industry, local jobs

Shifting the Narrative - Inevitability



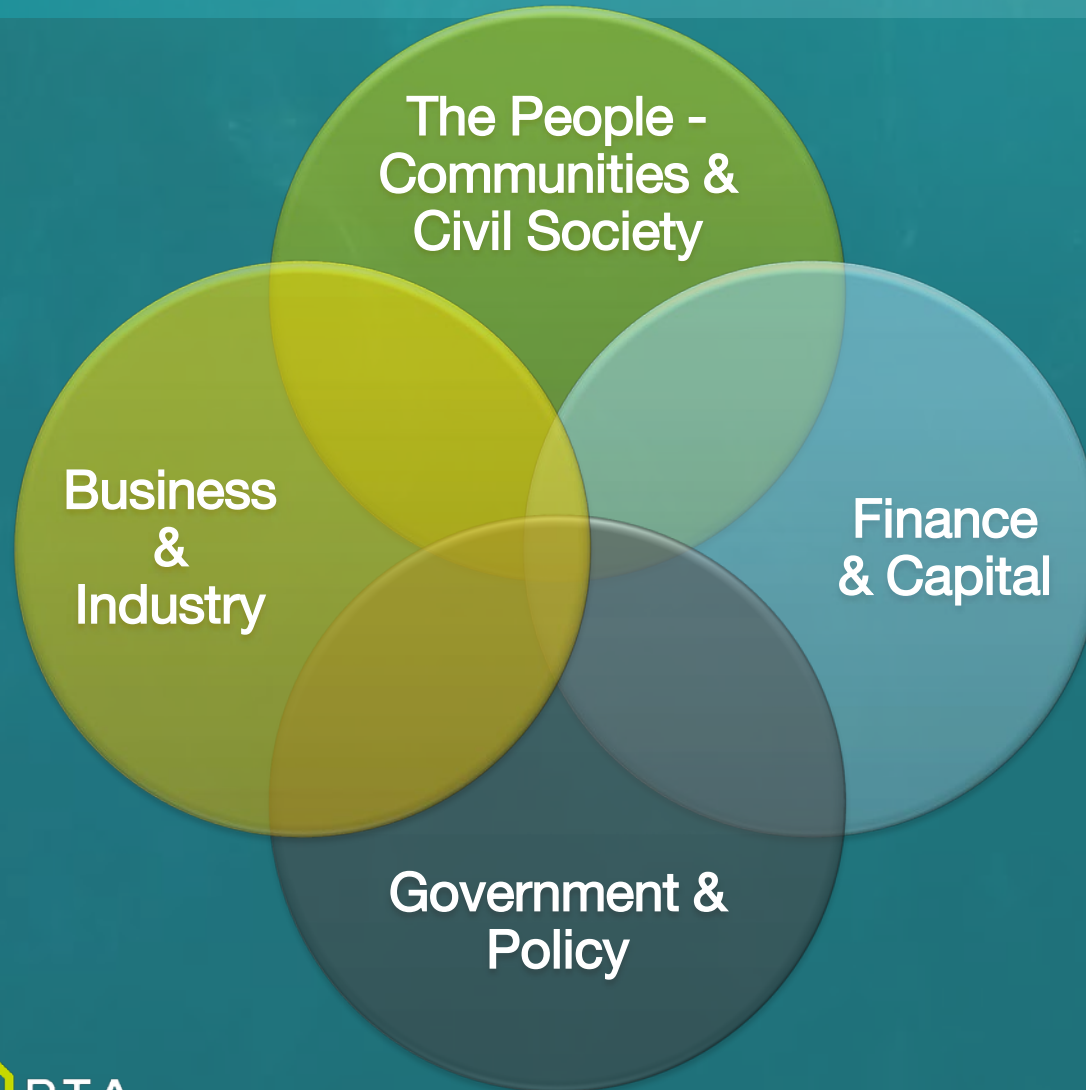
Shifting the Narrative - Crucial



What an early-growth
cause could and should
avoid



Collaboration - All Needed, None Sufficient



**Regional
Coordination Sweet-
spots**

- Consumer
- Trade
- Customer
- Policy

NEEP / RTA Asks of You

- Help, Energy, Ideas
- Collaboration
- Case studies
- And?...



To Close: Please...

1. ...ensure your next day-at-the-office is different from your last
2. ...feel (even) better about what you do
3. ...continue to help think about the future together

