

Energy Supply



Who is Energy Supply?

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Our mission is to switch to *clean energy use* through *policy changes*, *technological advancements*, and *infrastructure improvements*.

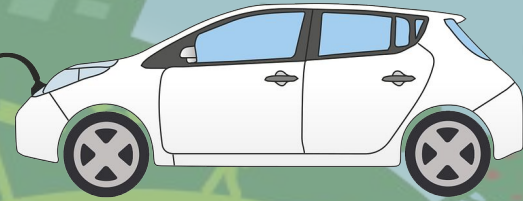
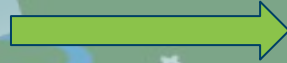
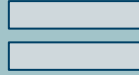
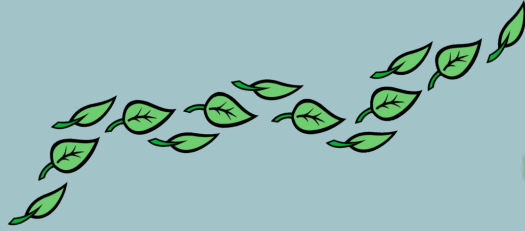
We have a strong focus on *social impact* and *environmental justice* around these changes.

We believe that for any change to happen there must be *continuous collaboration* across nations and sectors.

Looking to the future as inspiration, we hope that our efforts are the beginning of a *collaborative, just, and environmentally-focused world*.



Imagine...



Imagine...

- Renewable Energy = 80% global energy production
- 100% accessibility to clean energy sources
- Global Energy Market & Grid
- Drastic decrease in the use of Fossil Fuels
- International Cooperation



We already have the technology...

Nuclear Energy

Hydropower

Geothermal Energy

Biomass Energy



PROJECT DRAWDOWN®

We already have the technology...

Nuclear Energy

Hydropower

Geothermal Energy

Biomass Energy

Solar Energy

Wind Energy



We already have the technology...

Nuclear Energy

Hydropower

Geothermal Energy

Biomass Energy

Solar Energy

Wind Energy



Distributed Photovoltaics

We already have the technology...

Nuclear Energy

Hydropower

Geothermal Energy

Biomass Energy

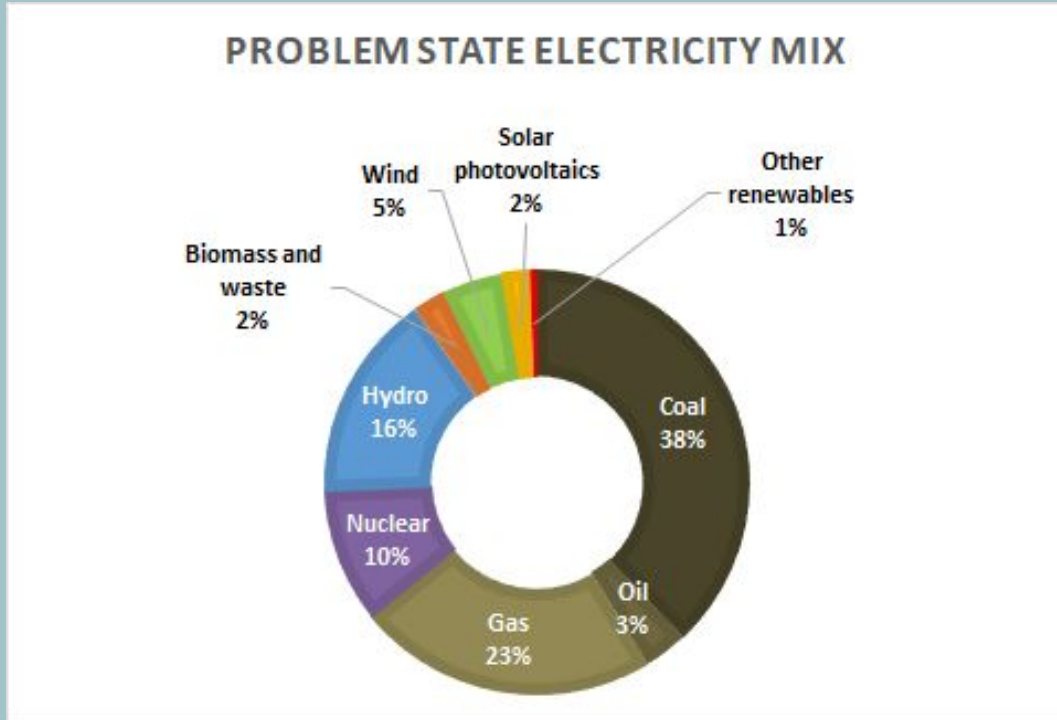
Solar Energy

Wind Energy



Offshore Wind Turbines

Present State Electricity Mix

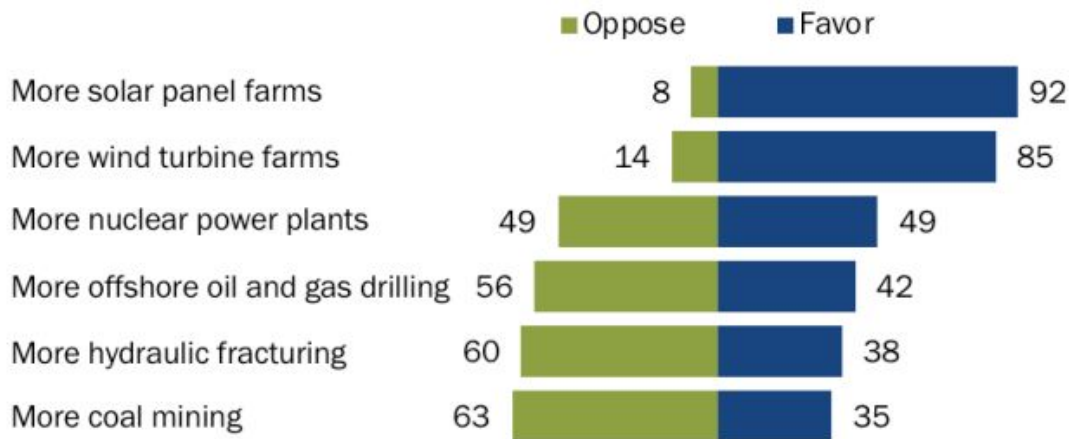


Data from International Energy Agency

We are at a social tipping point.

Most Americans favor expanding solar or wind power; half or fewer support expanding fossil fuels

% of U.S. adults who say they ____ expanding each energy source



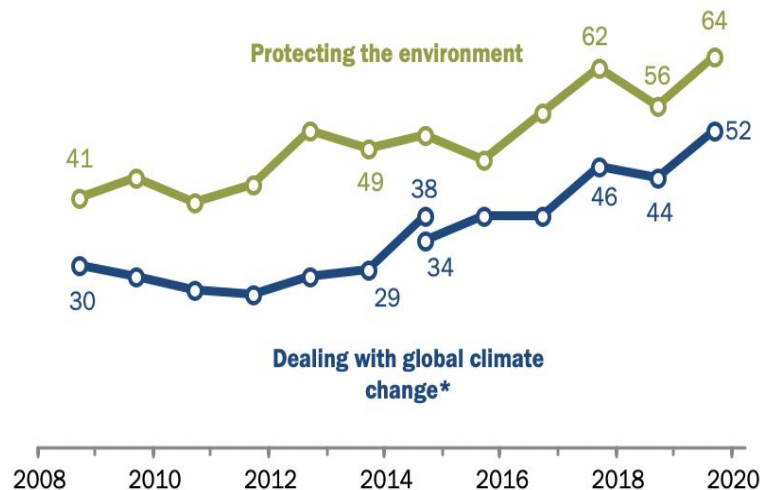
Note: Respondents who did not give an answer are not shown.

Source: Survey conducted Oct. 1-13, 2019.

"U.S. Public Views on Climate and Energy"

Increased support for prioritizing policies on the environment, climate change since 2011

% U.S. adults who say ____ should be a top priority for the president and Congress



10 Year Implementation Plan

Phase 1



Global Policy
Changes

Phase 2



Installation of clean
energy technologies

Phase 3



Transition
Period



Timeline



Green Stimulus Plan

“ How on earth
can we get the people
and the governments
On Board? ”



Whatever the weather
We only reach welfare

together

Green Stimulus Plan

“ A Competition
for the
BEST green
investment plan ”



Timeline



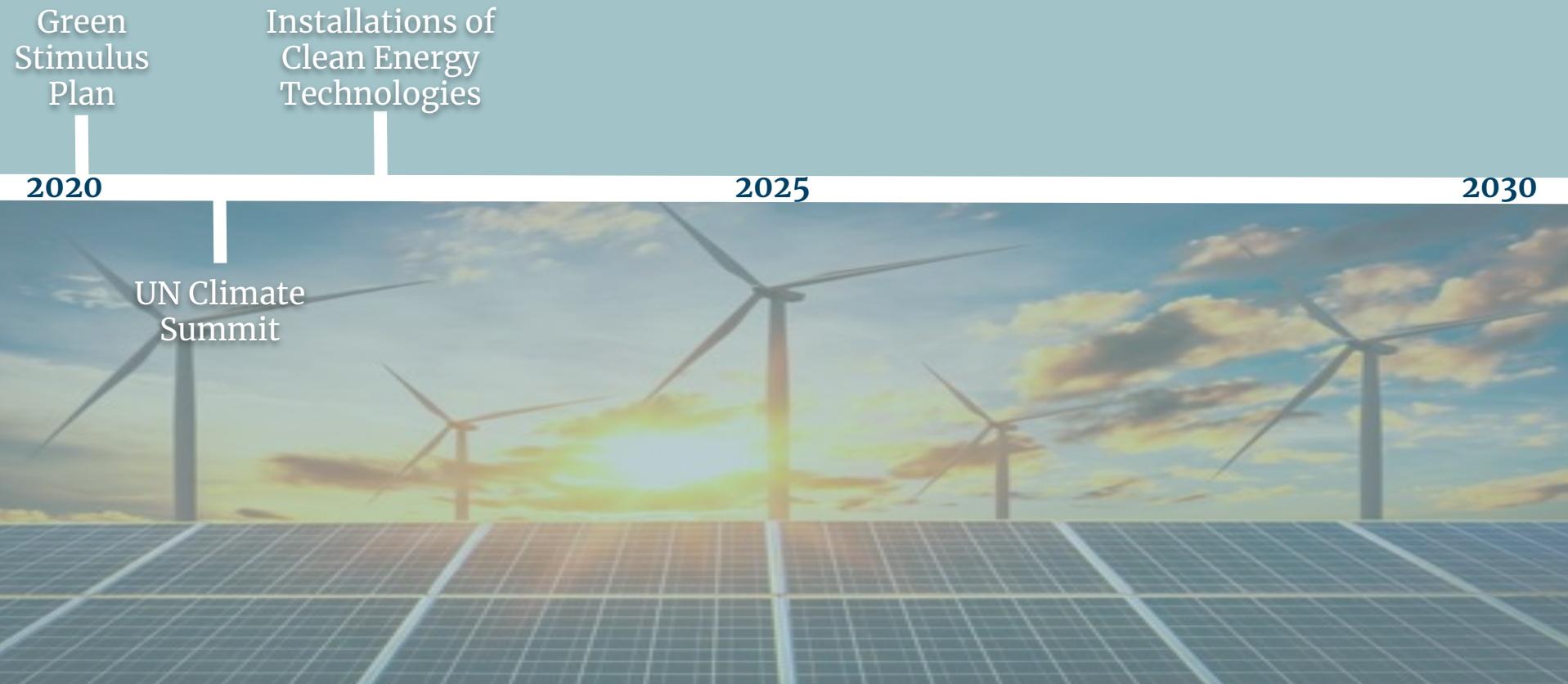
United Nations' Climate Summit

World leaders come together and agree to set certain global policies:

- Carbon tax
- Assistance for Developing Countries
- Resource & Technology Distribution
- Stricter regulation on the use of Fossil Fuels



Timeline

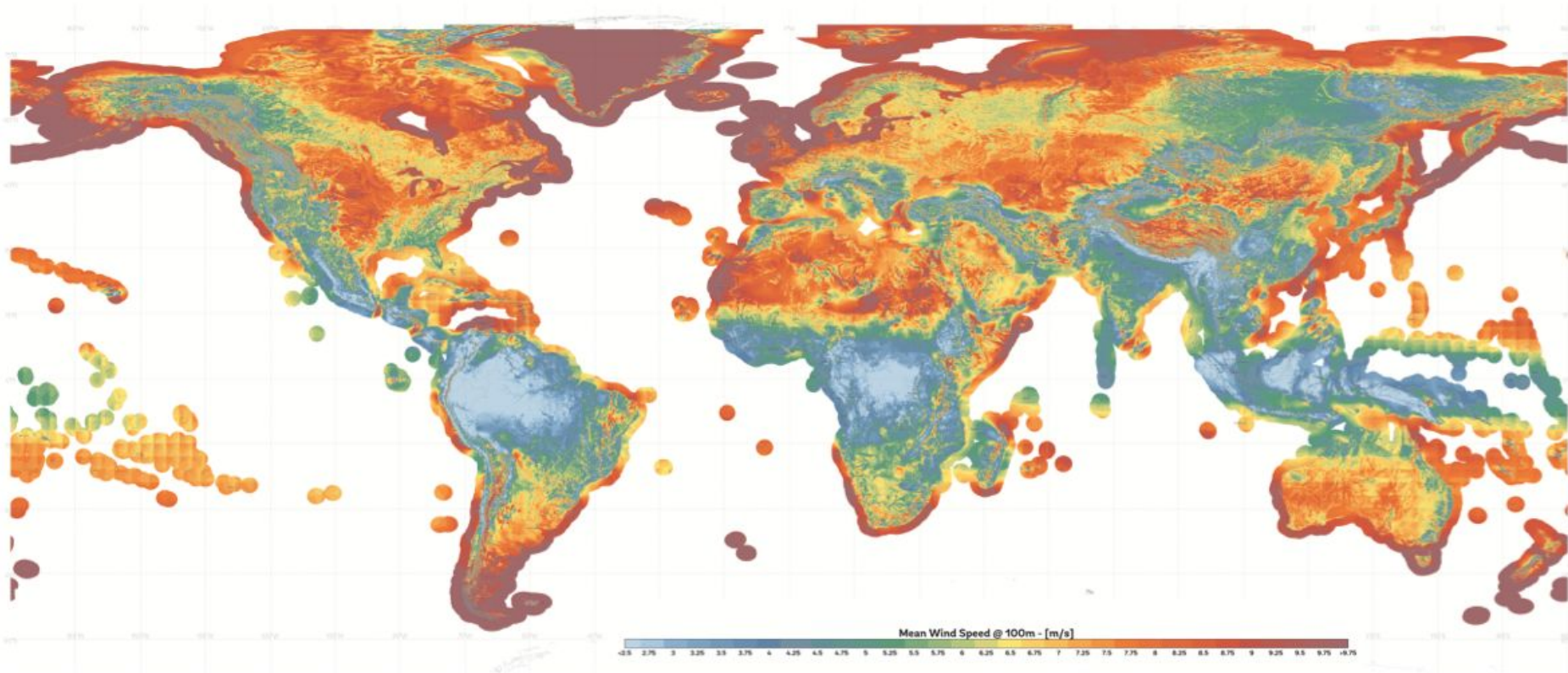




NOT Centralized vs. Decentralized Grids BUT Centralized & Decentralized Grids



MEAN WIND SPEED



Looking to nature as inspiration



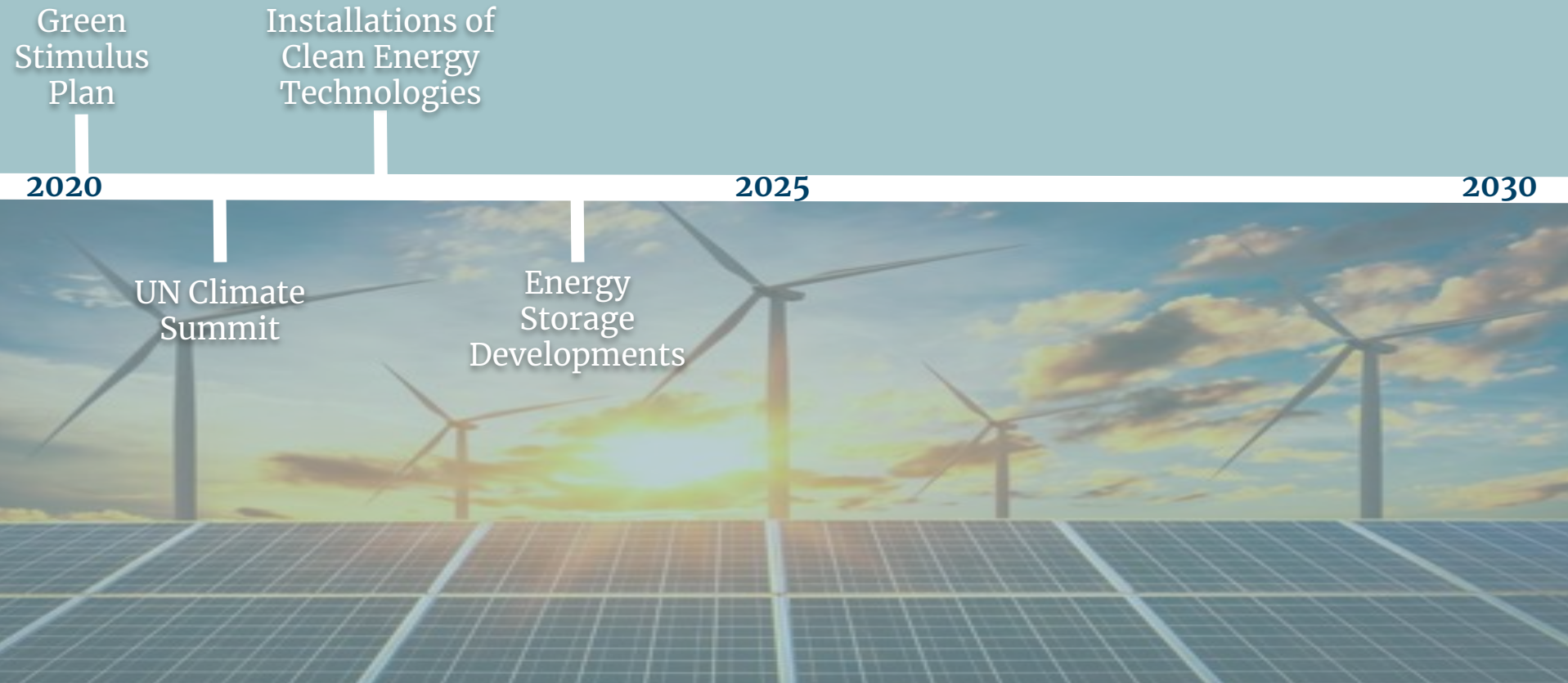
↑
Fin of a
Humpback
Whale



↑
Biomimicry
Wind Blades



Timeline



The California Duck Curve

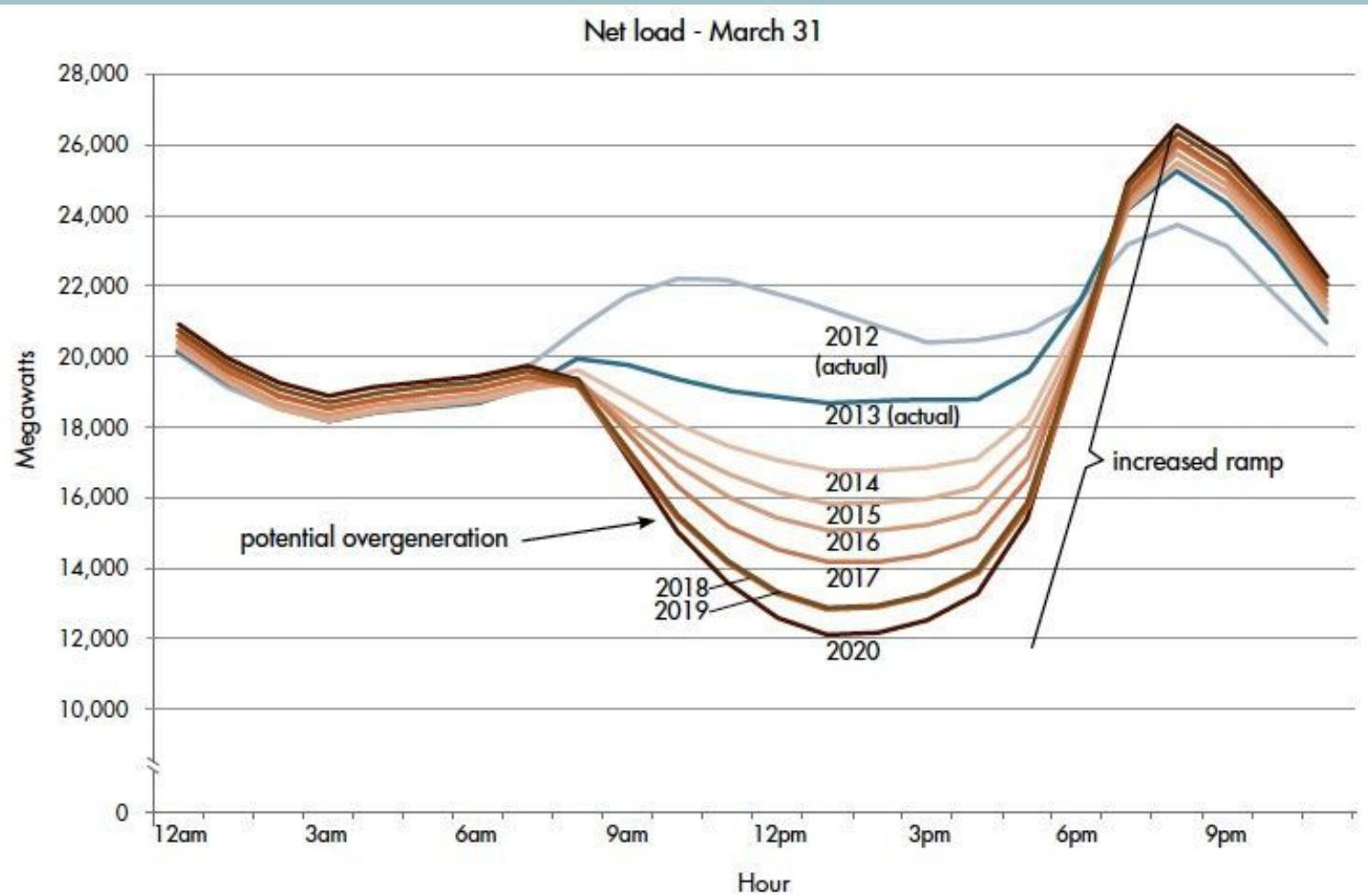
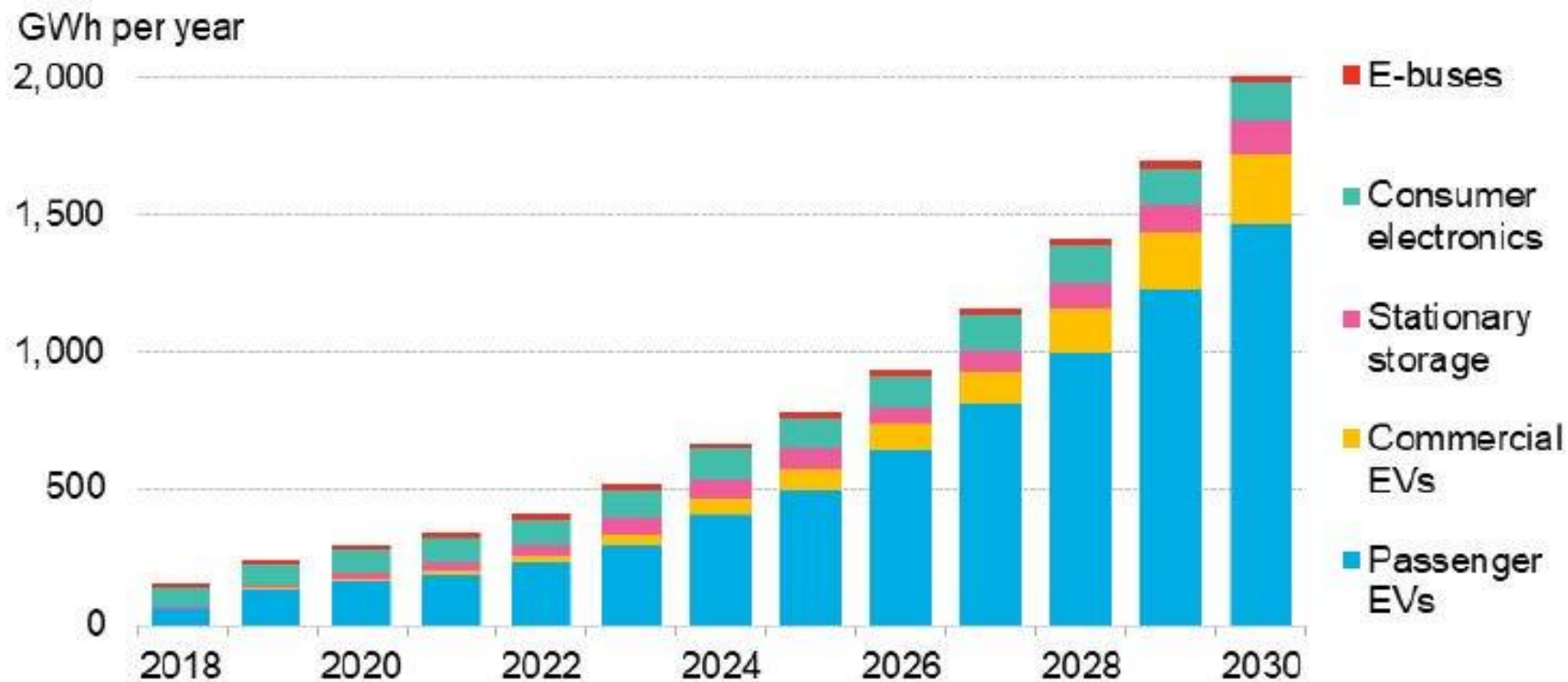
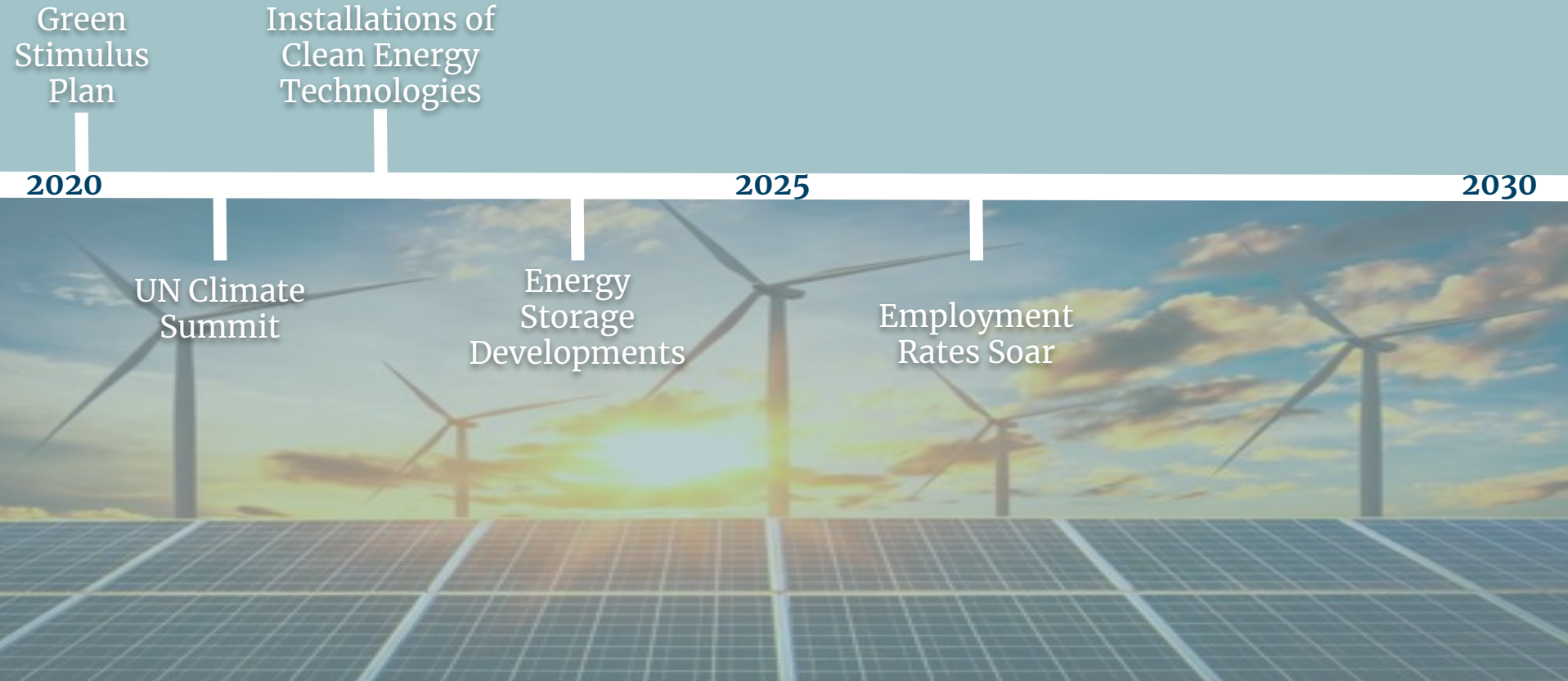


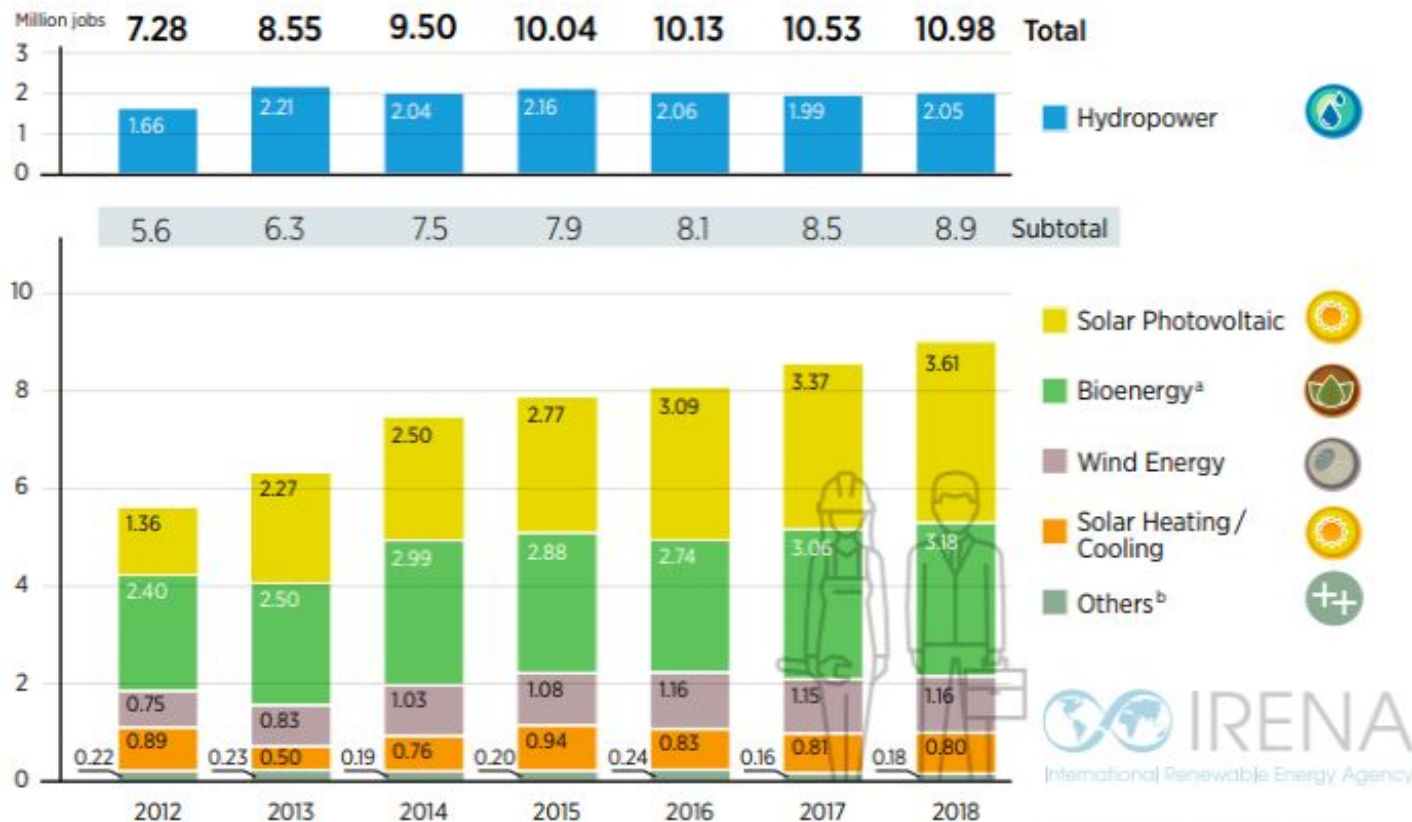
Figure 2: Annual lithium-ion battery demand forecast



Source: BloombergNEF, Avicenne (for consumer electronics).

Timeline





Source: IRENA jobs database.

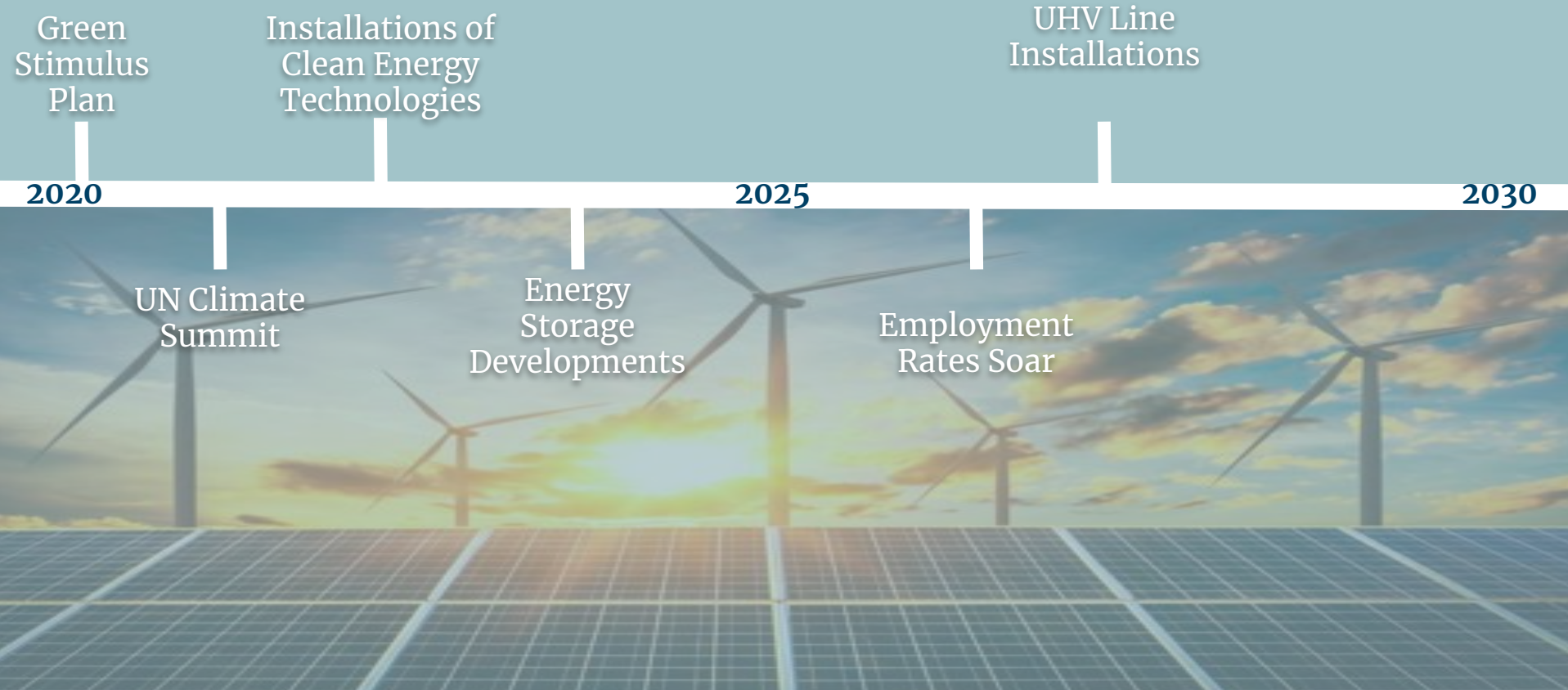
Note: Except for hydropower where a revised methodology led to revisions of job estimates, numbers shown in this figure reflect those reported in past editions of the Annual Review.

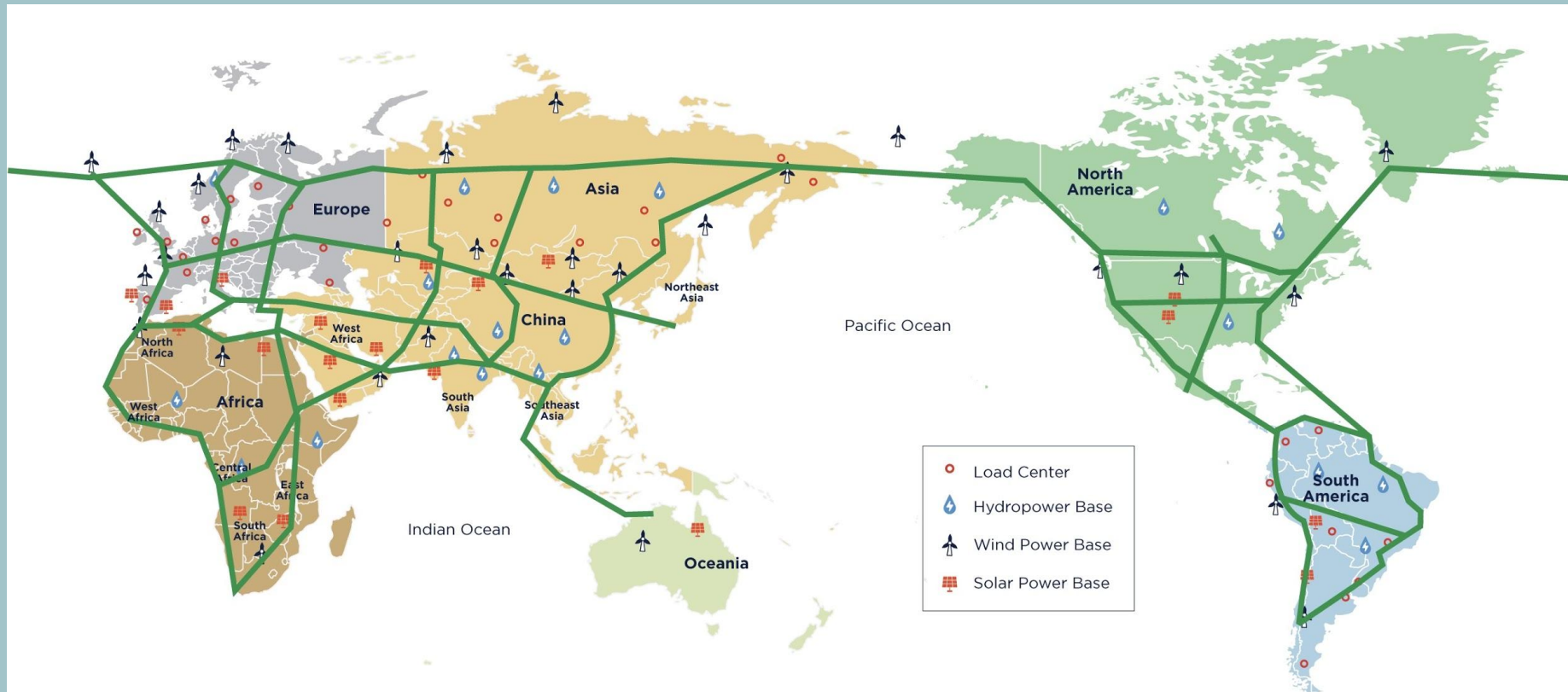
a. Includes liquid biofuels, solid biomass and biogas.

b. Other technologies include geothermal energy, concentrated solar power, heat pumps (ground-based), municipal and industrial waste, and ocean energy.

Jobs per
renewable
energy
source
(millions)
from
2012-2018

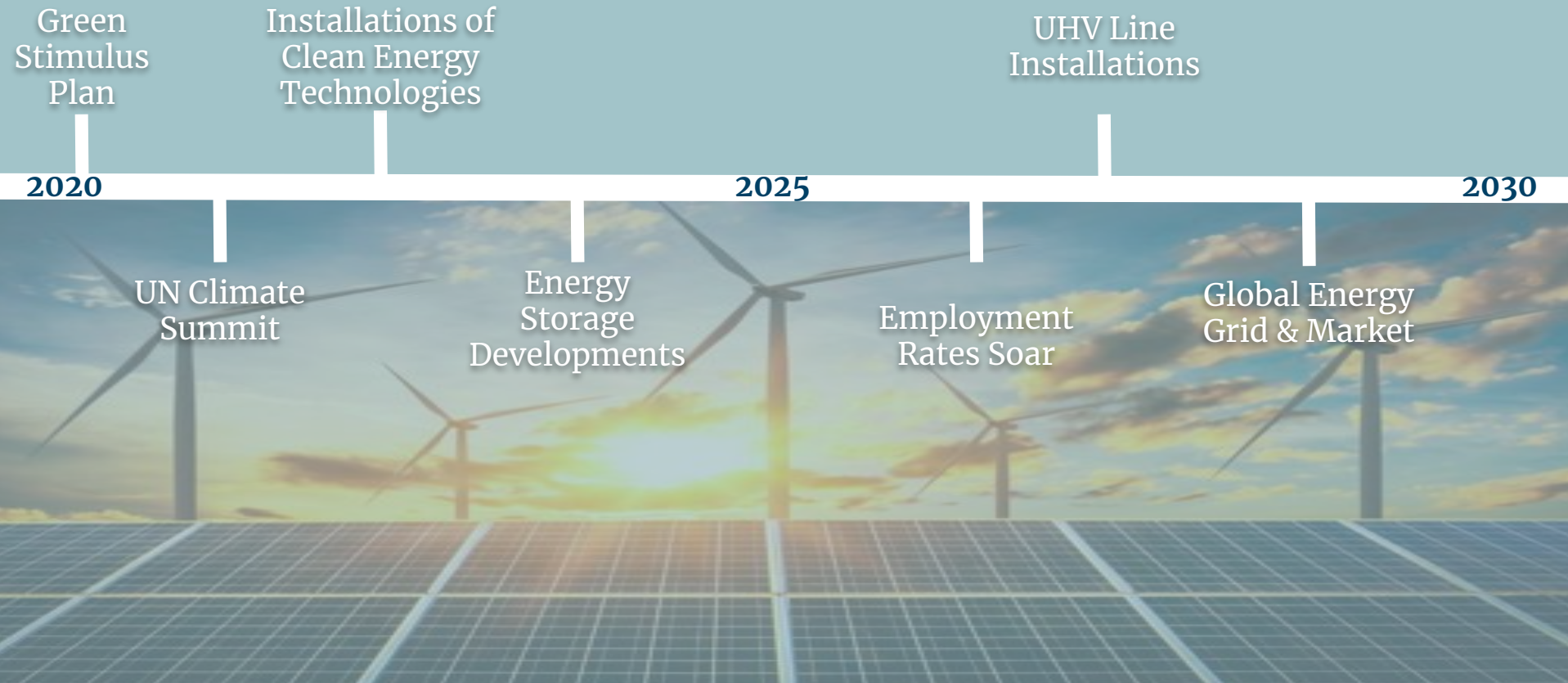
Timeline





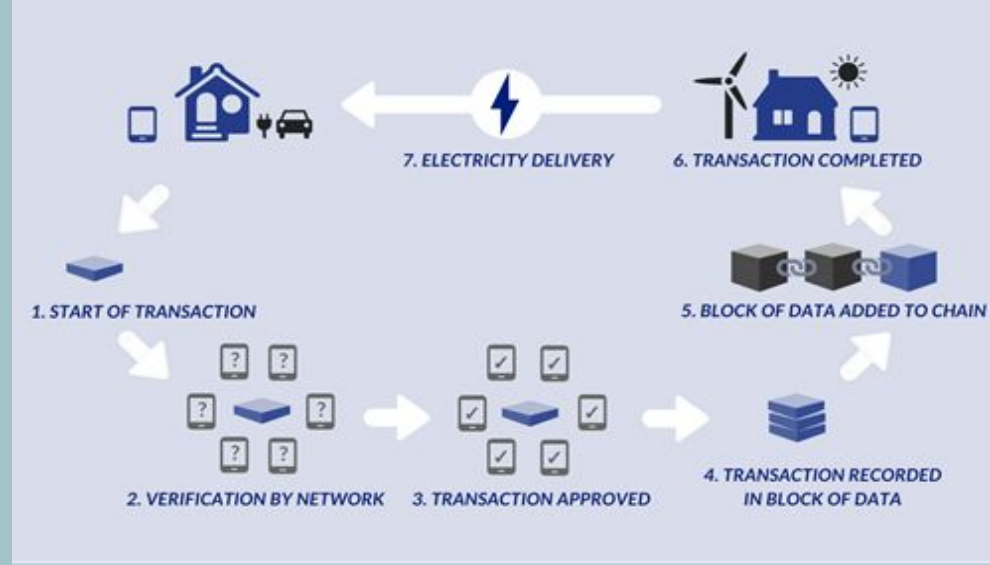
Source: Global Energy Interconnection Development and Cooperation Organization, "About GEI," <https://en.geidco.org/aboutgei/>, accessed January 20, 2020.

Timeline

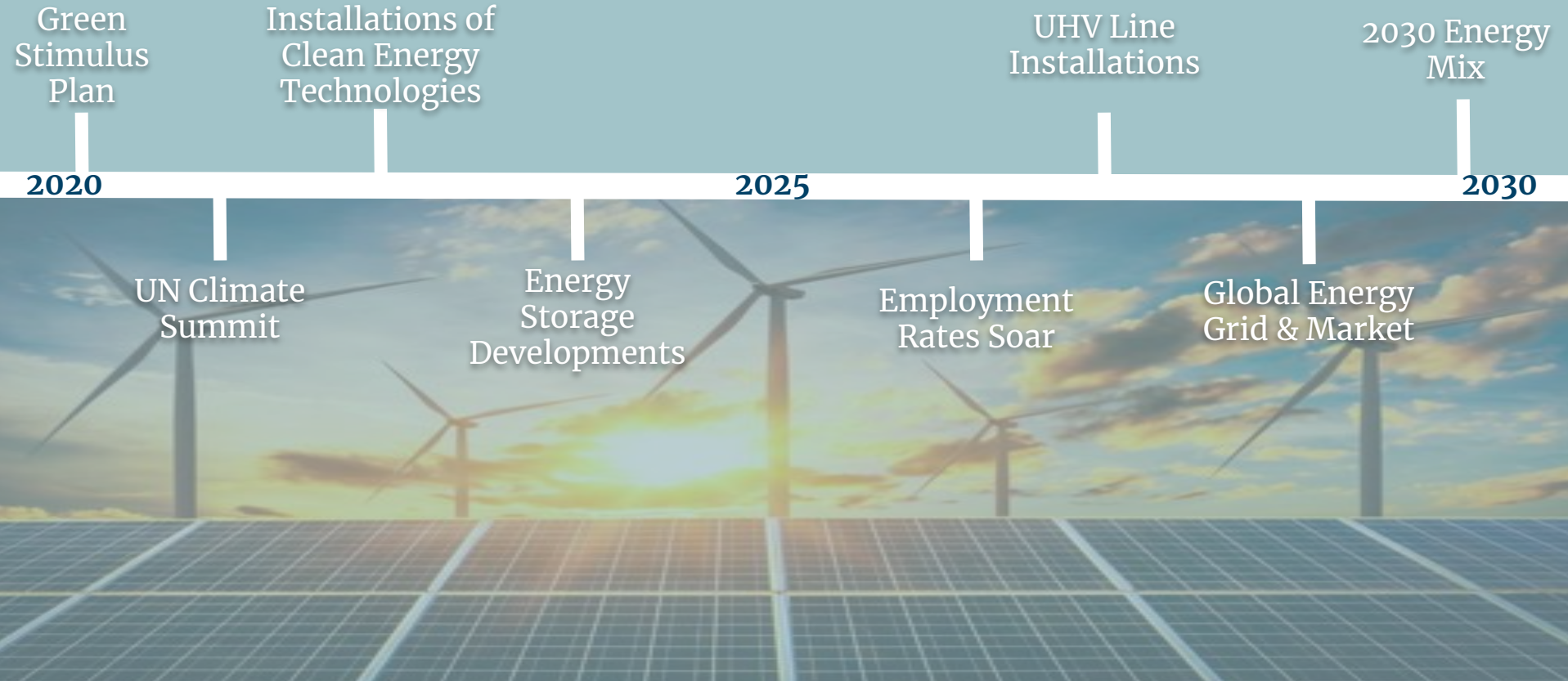


Global Energy Market

- Energy Trading vs Fuel Trading
- Energy trading market surpassed oil in mid 2020s.
- Blockchain technology enables players big and small to sell or buy energy fairly and equally

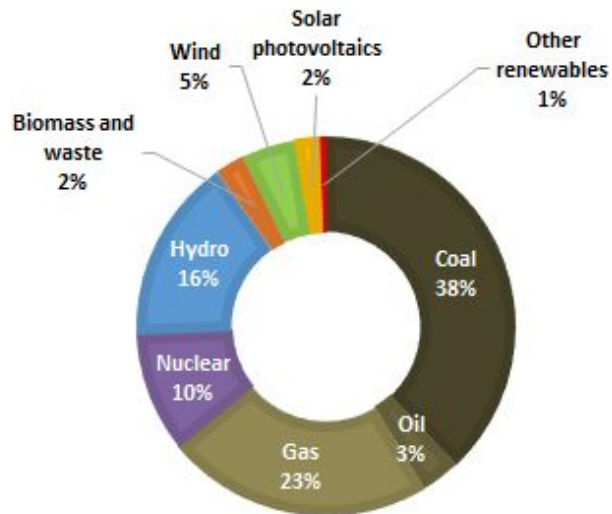


Timeline

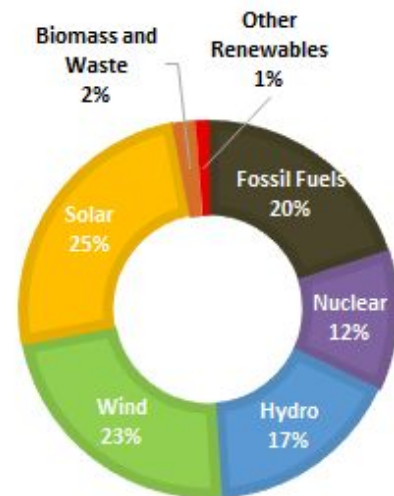


Electricity Mix 2030

PROBLEM STATE ELECTRICITY MIX



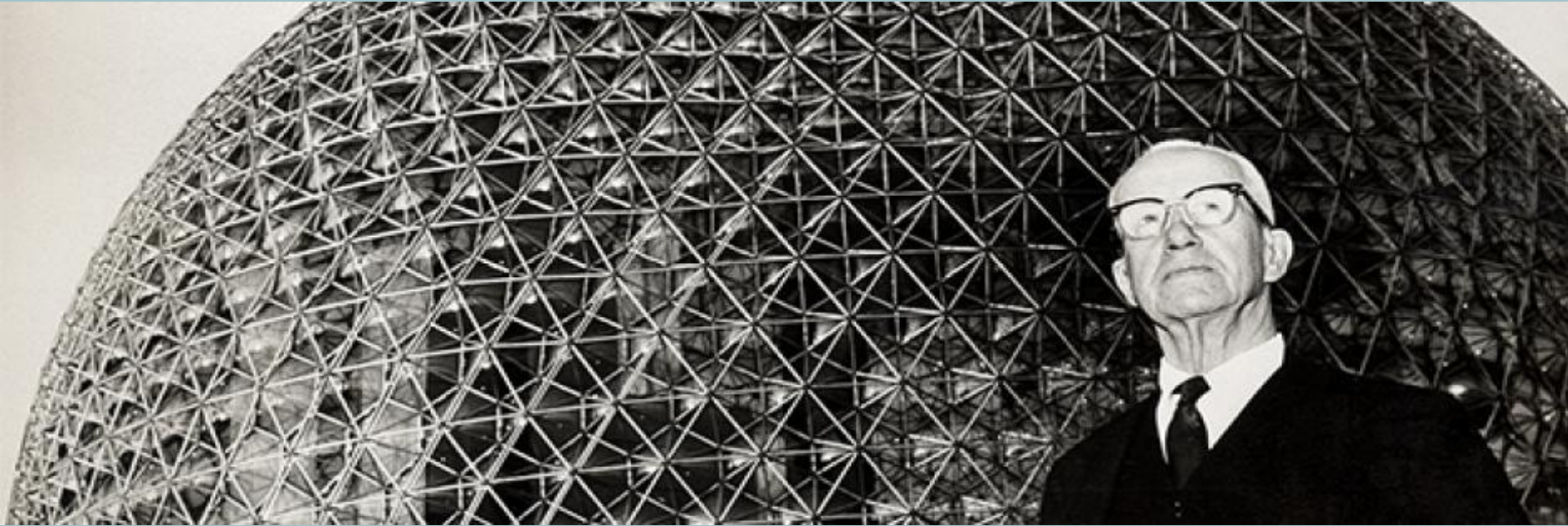
2030 ELECTRICITY MIX (PREFERRED STATE)



10 Years

How do we take the
first step?

“Be a trimtab.”



—Buckminster Fuller

3.5% Rule:

“Once around 3.5% of the whole population has begun to participate actively, success appears to be inevitable.”

–David Robson, BBC

Erica Chenoweth, Harvard U

Images: UC Berkeley Climate Strike 2019



WE ARE:

- Part of the 3.5%
- The Trimtab
- Dreamers
- Not the only ones





Imagining



DOING



Questions?

GO BEARS!!