Theory of Change *for implementation*: Accelerating a 'win-win' international energy transition away from fossil fuels

For energy security, resilient economies & business, and meeting the 2 °C Paris target

A theory of change for consensus-building among a broad coalition for system transition, in development by a think tank network of 100+ professionals from energy, finance, sustainability, politics, & interdisciplinary academia

Developed by:

UNITED FUTURE

Featuring support from:

Carbon Tracker Initiative

Global Compact Network UK

Global Compact Network Netherlands

Ørsted

EMPLOYEES for our FUTURE.

Summary

Coordinated by:
- Thij van Aalst
- Gretel Gambarelli
- Colm Hastings

(ex-UNEP & ex-WBCSD)
Contact: energy@unitedfuture.earth

With contributions from:
- Svend Brun Hansen - **Ørsted**
- Matheus Mouraria - **Climate Reality Leaders** – Amsterdam hub
- Arjan Keizer - **Employees for our Future**
- Samantha Chinyoka - **Scottish Power Renewables**
- **Ember** - energy think tank – data analysis

Est. reading time: 5-15 minutes

Purpose, Information & Contents

Purpose of this project:
Build consensus on implementation of shared pathway for international energy transition with broad coalition of decision-makers and experts, catalyzed by TAFF coalition at Santa Marta conference in Colombia, 24-29 April 2026. This is a co-creation project with continuous optimization.

Who we are:
An informal, open think tank network of professionals across sectors including energy, finance, academia, sustainability, and public policy, coordinated by former United Nations employees (United Future)

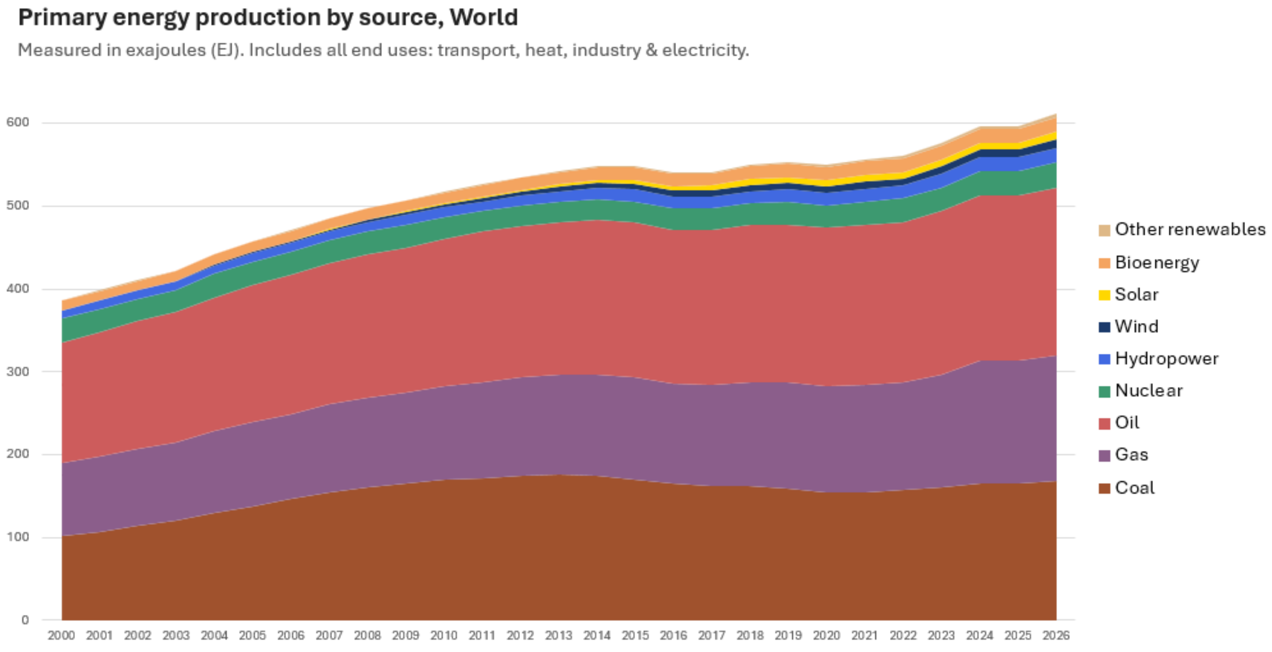
Possible Outcome of Implementation:
World on track for 2.0 °C target of Paris Agreement + substantial additional progress on SDGs 7, 9, 13, 14, 15, and 17, before 2040

Request:
30-minute conversation to build consensus on common theory of change for implementation with TAFF coalition

Contents:

Our analysis

The global energy transition is not progressing fast enough to meet Paris Agreement's targets, though there is potential for acceleration



Data source: Energy Institute Statistical Review of World Energy (2025)

1. Global emissions must decline by ~35% by 2035 for Paris Agreement's 2 °C pathway and ~55% for 1.5 °C pathway, compared to 2025 (currently on track for 2.8 °C warming)**
2. Fossil fuels still count for ~80% of global energy supply. Renewables remain largely **additive** (adding new) rather than **substitutive** (replacing old) in global energy mix. This is largely **driven by fossil energy companies'** business strategy
3. Carbon removal (direct air capture) solutions are significantly underperforming and widely considered insufficient to close emissions gap within required timelines***.
4. Driven by rapid cost declines in **solar** and **battery** technologies, **new "Electrotech" solutions** are proving a **far more efficient** and **cheaper** technology than fossil fuels* (see Appendix 1). **Global investment in clean energy overtook investment in fossil fuels in 2025*** (see Appendix 1).
5. This opens pathway for **depolarized** and **depoliticized** energy transition, similarly to **Montreal Protocol**. **Santa Marta conference 2026** offered unique opportunity to begin implementing alternative pathway, for which we developed this Theory of Change to action best-case scenario

Sources: * (IEA, 2026; Ember (Walter et al., 2024) **(UNEP, 2025; Our World in Data, 2024 *** (Bradley, 2025; Kerry, 2025)

Our analysis

We are at the start of an S-Curve in global energy transition

STRUCTURAL BARRIERS FOR CONSUMPTION DISSOLVED

Intermittency problem has been solved, solution is scaling up

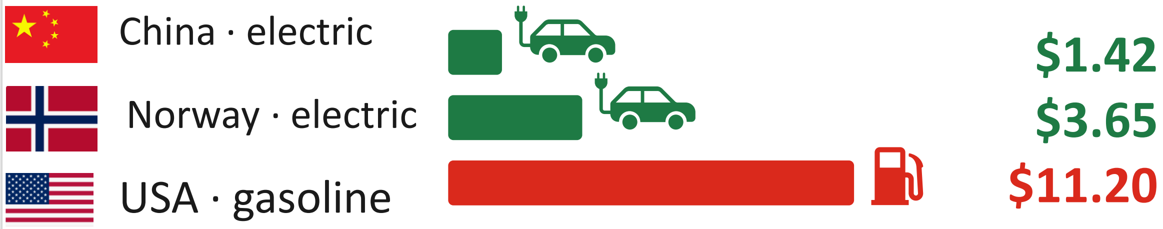
Integrated solar + battery and solar + wind solutions, powered by plummeting costs of lithium-ion batteries, have overcome major obstacle preventing replacement of fossil fuels.

Refuelling parity has arrived

China's BYD megawatt chargers (1,000 kW) add up to **400 km of range in 5 minutes** — the speed of a petrol fill-up, and **2× Tesla's Superchargers**. 4,000+ stations rolling out across China.

BY THE NUMBERS

Cheaper to drive



Global investment in renewables nearly *double* that of fossil fuels in 2025

Clean energy investment nearly double fossil fuel spending, IEA says

Global investment in clean energy technologies is expected to reach $US2.2 trillion this year, nearly double the amount flowing into oil, gas and coal, according to a new report by the International Energy Agency (IEA).

Renewables Are Already Winning on Cost

Our analysis

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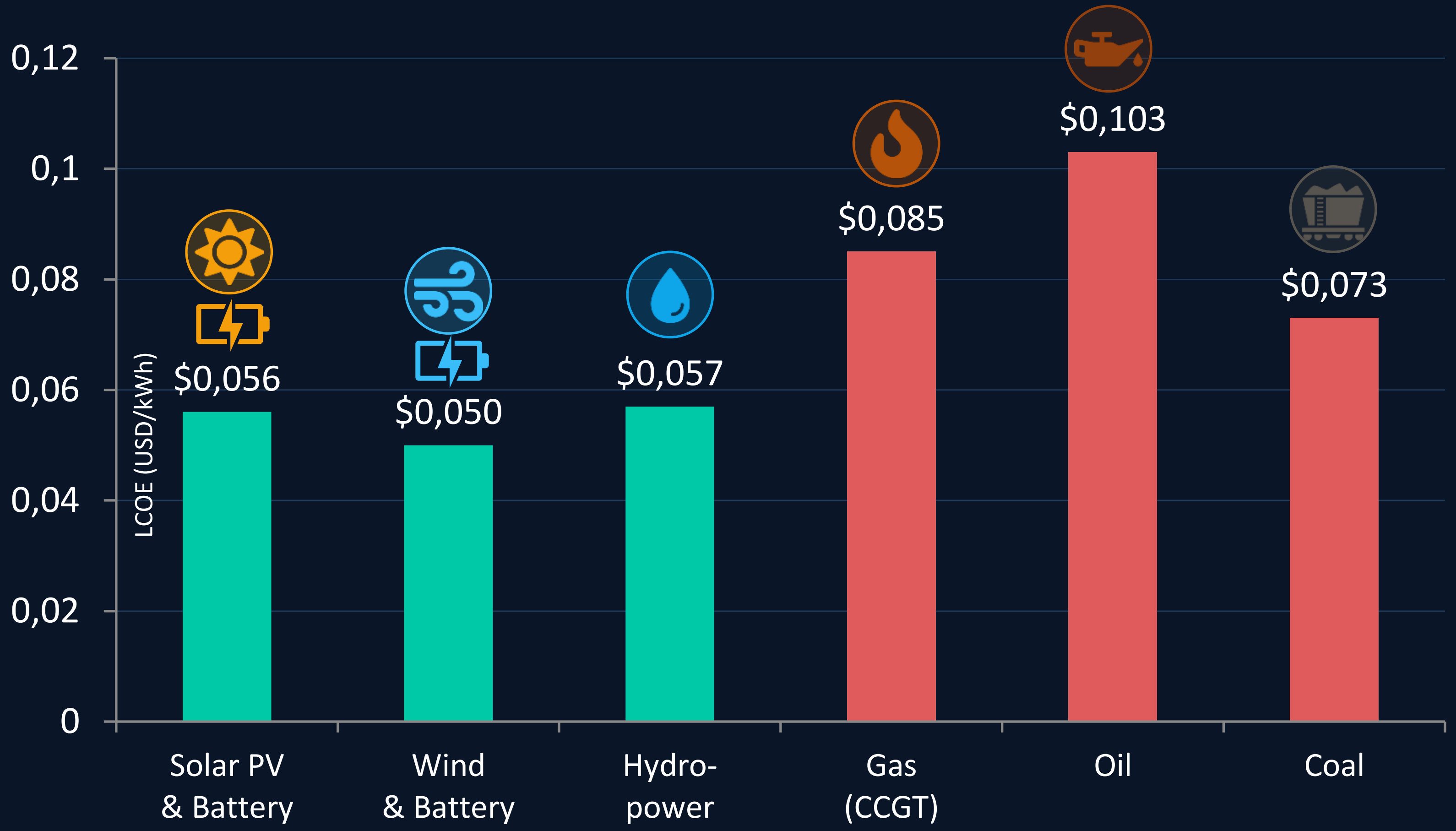
Solar & wind with battery storage now cheaper than any new fossil fuel alternative



All figures: IRENA 2024 global weighted average LCOE, newly commissioned utility-scale projects · Solar+Battery & Wind+Battery: IRENA 2026 firm LCOE report · Oil: estimated. Wind: average offshore & offshore

Renewables   Fossil Fuels

Source: IRENA Renewable Power Generation Costs in 2024 (July 2025) · irena.org

91%

of new renewable projects cheaper than any fossil fuel alternative

$1.42 / 100km

China electric car

$3.65 / 100km

Norway electric car

$11.20 / 100km

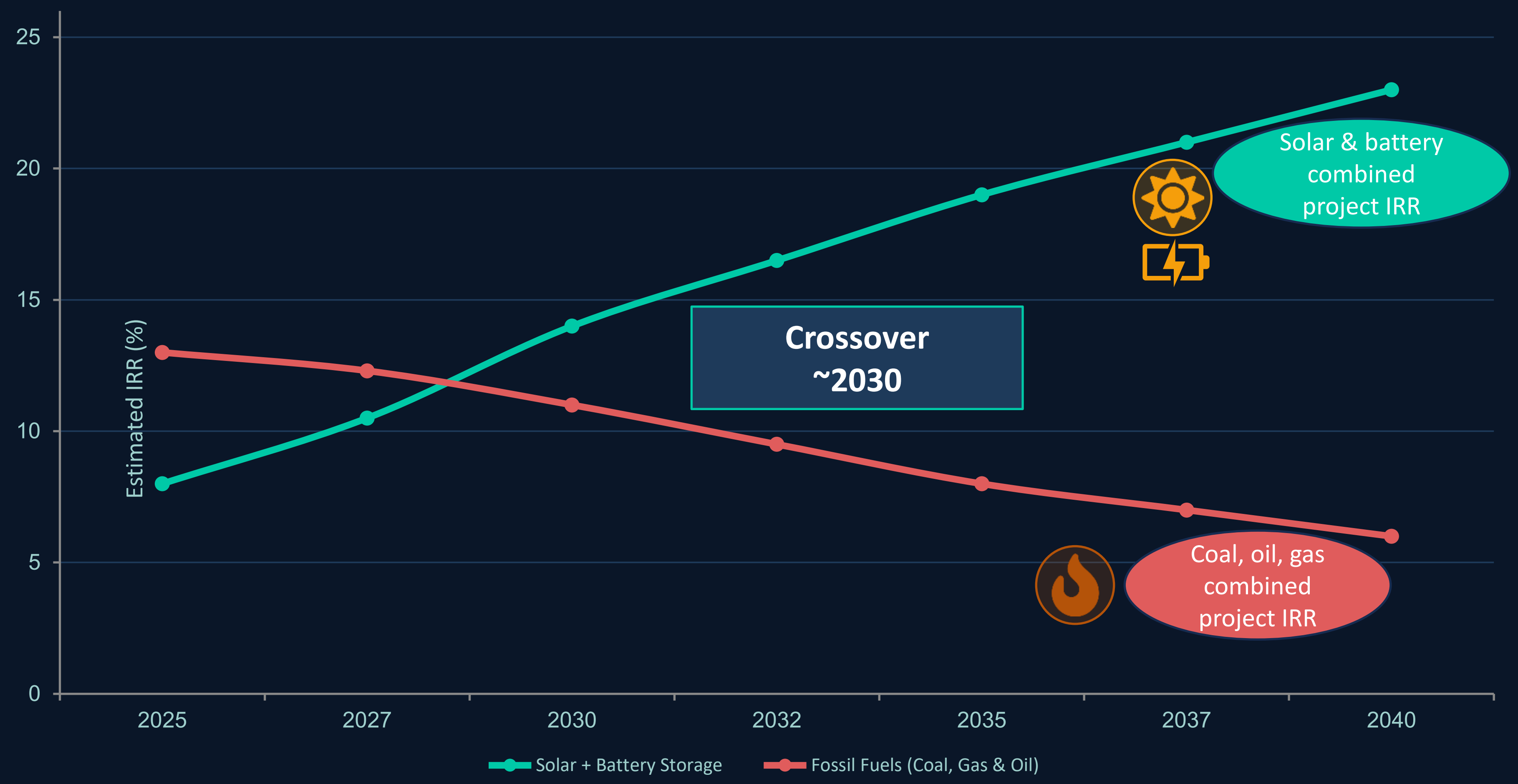
USA gasoline car

Source: IEA, 2026

Solar + Battery Will Outcompete Fossil Fuels on Returns by 2030

Our analysis

Estimated project-level IRR (%) — Solar + Battery Storage (combined) vs. Fossil Fuels (coal, gas, oil combined)*



93%

Fall in battery storage costs Since 2010 → $192/kwh in 2024 (IRENA, 2025)

$76/MWh

Total cost of dispatchable solar +Battery (vs. ~$77/mwh gas CCGT) (Ember, 2025)

~2030

Peak demand for coal & oil; gas peaks ~2035. Rising stranded asset risk. (IEA WEO 2025)

⚠ *IRR projections are illustrative estimates based on current cost trajectories and IEA/IRENA/BloombergNEF/Ember scenarios.*
** Actual returns vary significantly by geography, policy regime and project structure.*

Sources: IRENA Renewable Power Generation Costs 2024 (Jul 2025) · Ember Global Electricity Review 2025 & Battery Storage Analysis (Dec 2025) · IEA World Energy Outlook 2025 · BloombergNEF Energy Storage Cost Survey 2025 · IISD / Carbon Tracker| *realities may vary across different markets, geographies*

Energy Technology Comparison (2024-2025 data)

Our analysis

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Sources: IRENA 2024, IEA WEE 2025, NREL ATB 2024, EIA AEO2025

	Technology	MegaWatt / $1M USD	Jobs / $1M	Ownership	~Time to install	Conditions incl.	*Specifications
	Solar PV & battery*	**~1.45** MW/$1M	**~5–7** jobs/$1M	Communities & Households	1 week – 4 years across types	Consistent solar intensity	With recycled & responsibly sourced metals & minerals
	Wind & battery*	**~0.63** MW/$1M	**~3–5** jobs/$1M	Communities, permitting	4-11 years across types	Consistent wind intensity; space	With recycled & responsibly sourced metals & minerals
	Hydropower*	**~0.33** MW/$1M	**~2–4** jobs/$1M	Government-linked	3-15 years across types	Mountains with rivers; engineering expertise	With eco-friendly systems e.g. fish taxis
	Nuclear* – SMR	**~0.13** MW/$1M	**~3–5** jobs/$1M	Government-linked	10-15 years, may reduce to 5	Rare skill expertise; no earthquakes	With safely stored waste; higher maximum capacity useful in data centers
	Nuclear* – large-scale	**~0.10** MW/$1M	**~2–3** jobs/$1M	Government-linked	10-20 years	Rare skill expertise; no earthquakes	With safely stored waste; higher maximum capacity useful in data centers
	Geothermal*	**~0.25** MW/$1M	**~2–4** jobs/$1M	Permitting complexity; business	1-10 years across types	Accessible geothermal currents; rare skill expertise	Combined with environmental impact assessments
	Green Hydrogen*	**~0.67** MW/$1M	**~2–4** jobs/$1M	Permitting complexity; business	1-15 years across types	Rare skill expertise; other renewables to generate	Generated by renewables
	Oil*	**~1.00** MW/$1M	**~1–2** jobs/$1M	Permitting complexity; business	6 months to 15 years across types	Presence of oil fields	With point source carbon capture
	Gas*	**~0.67** MW/$1M	**~1–2** jobs/$1M	Permitting complexity; business	1-15 years across types	Presence of gas fields	With point source carbon capture
	Coal*	**~0.45** MW/$1M	**~2–3** jobs/$1M	Permitting complexity; business	2-15 years across types	Presence of coal deposits	With point source carbon capture

Analysis

3 scenarios for international fossil fuel phase-out

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We can go here if we take right action

++ Win-win: a Just Transition for All

*Accelerated innovation and **intra-transitions** of energy companies make business and socio-economic cases for transition clearer, igniting a self-reinforcing feedback loop of global transition, where everyone wins.*
Supports effective implementation of Fossil Fuel Treaty

Win-win co-benefits:

+ Lower energy prices
+ More clean jobs long-term
+ Energy independence
+ Fewer microplastics
+ Less air pollution

Reduced timescale

We are here

+ − Win-lose: Competition of Renewables vs. Fossil fuels

Fossil fuel companies worldwide continue to lobby inside governments against policies supporting transitions towards electrotech. Meanwhile, solar & battery prices decrease, the competitive edge grows and publicly funded infrastructure slowly shifts towards renewables. A temporary overshoot of climate targets is likely, with significant socio-economic consequences.

Increased timescale

− − Lose-lose: Fatal delays in the transition

A combination of worldwide aggressive lobbying by fossil fuel companies and geopolitical developments delays public support needed to shift infrastructure towards grid electrification. Climate tipping points are triggered, people & planet face crisis escalation & ecosystems collapse.

Question

How can we **clear systemic blockers** and **accelerate** the **international energy transition** towards a **tipping point of >50% renewables** in **global energy mix,** with **benefit to all?**

In short, how do we realize this win-win-for-all scenario?

- ++ **People working in fossil fuel industry**
- ++ **People working in mining**
- ++ **Climate**
- ++ **Nature**
- ++ **Indigenous communities**
- ++ **Consumers**
- ++ **Progressives**
- ++ **Conservatives**
- ++ **Countries**

Our theory of change:
*Highlights**

We can accelerate a just international energy transition towards a tipping point of 50% renewables

through processes optimizing innovation and promoting intra-transitions of energy companies

1. Innovation Accelerators

Cooperative networks, inspired by SEMATECH project for semiconductors in 1987-2015, can help to reduce costs and **upscale solutions** internationally to complete final pieces of new energy systems: i.a. **mineral & metal recycling**, **remote-controlled mining**, **charging stations for electric vehicles**, and **cable & smart grid infrastructure**

Implemented by: **Governments** (first)

2. Intra-transitions

Internal processes of fossil fuel companies to transition from producing mostly (>60%) fossil fuels to mostly (>60%) renewables, accelerate **substitution** in global mix. E.g. Ørsted, Iberdrola

Implemented by: **Energy companies**

3. Feedback loop

Innovation Accelerators & intra-transitions combine into loop of self-reinforcing financial processes, accelerating transition towards **tipping point** of 50% renewables in global energy mix, lower energy price

Implemented by: **All stakeholders**

4. Signals & Coalition

Required to trigger this process:

a) Coordinated communications & plans from **policy** and **institutional investors**, +
b) Broad funding **coalition** for Innovation Accelerators

Implemented by: **All stakeholders**

It is possible to accelerate a win-win energy transition, where **everyone benefits** more than in the current situation, including people working in fossil fuel industry, worldwide.

** Full theory available upon request*

Theory: Step 1

What is an Innovation Accelerator?

Innovation Accelerator =

*"A low-cost, open **cooperative network** across many countries, **hosted by governments**, in which companies, governments, universities, and pre-existing non-profits collaborate based on **win-win** logic (positive-sum), through a shared governance framework, accelerating an innovative transition by **reducing costs**, **scaling up technological solutions**, and **cascading policy instruments**. This network guides long-term structural change, exchanging communications* and **knowledge** in a **precompetitive space**. This network **optimizes efficiency in upscaling innovations** of similar solutions across all members with a shared mission and **innovation culture**, accessing **pooled funding** from a broad coalition of funders."*

**For theory on how these communications can be structured, see Appendix 2.*

Sources:

- Mokyr, 2016; Aghion & Howitt, 1992 *(Nobel Prize winners 2025)*
- Loorbach & Verbong, 2012
- Elzinga et al., 2023

Examples include:

1. SEMATECH

Semiconductor research (1987-2005): Massive PPP (Public-Private Partnership) in semiconductor technology combining universities, governments & businesses.

2. ITER

Nuclear fusion (2013-2034): Broad funding coalition for International Thermonuclear Experimental Reactor.

3. Human Genome Project

DNA research (1990-2003): Massive funding coalition in bio-research combining universities, public and private sectors in 7 countries.

Theory: Step 1

Innovation Accelerators upscale transition solutions & reduce costs for new energy systems

- **Low cost** to build initial network for knowledge exchange, thanks to existing communication technology
- **Optimize efficiency of knowledge exchange*.** If solution works in one country, it can be easily tested in other countries, with quick support and efficient knowledge exchange due to precompetitive space.
- **Year-round coordination** on **implementing policy instruments** among members
- **Patent buy-outs*** can be included, providing collective tech access to members
- **Venture catalysts** can be included, scaling up production of solutions
- **Economies of scale increase**
- **Pooled funding** becomes available for connected projects in thematic **tracks**
- **R&D costs decrease** due to pooling in combined R&D budgets. Duplication is avoided. **Costs of technology decrease further**, strengthening competition with older technology **Payback time decreases** and **ROI increases** by accelerated innovation
- Frequent reporting on collective progress increases **investors' trust**
- **Shared governance framework**** is used for guiding **long-term structural change**
- **Mission-specific innovation systems***** catalyze "solution-directionality" in participants

Sources:
- *Mokyr, 2016; Aghion & Howitt, 1992
- **Loorbach & Verbong, 2012
- ***Elzinga et al., 2023

Theory: Step 1

Innovation Accelerator:
Upscaling technology for universal benefit

Membership

Governments
Hosted by governments of multiple countries, supports de-risking

Businesses
Cooperate on development & upscaling of new tech and contribute R&D Budget

Universities & non-profits
Contribute knowledge, research & development

Financial Institutions
(public & private) Supporting investment in debt and equity

3-fold benefit

1. Knowledge Exchange
with optimized efficiency

2. Patents: collective buy-outs
patents made available to all

3. Pooled funding & VCs
upscaling new tech

Result
Tech upscaled, cost reduced

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Theory: Step 1

An Innovation Accelerator in global energy can speed up transition away from fossil fuels

How can we shape an Innovation Accelerator for global energy, in context of TAFF coalition?

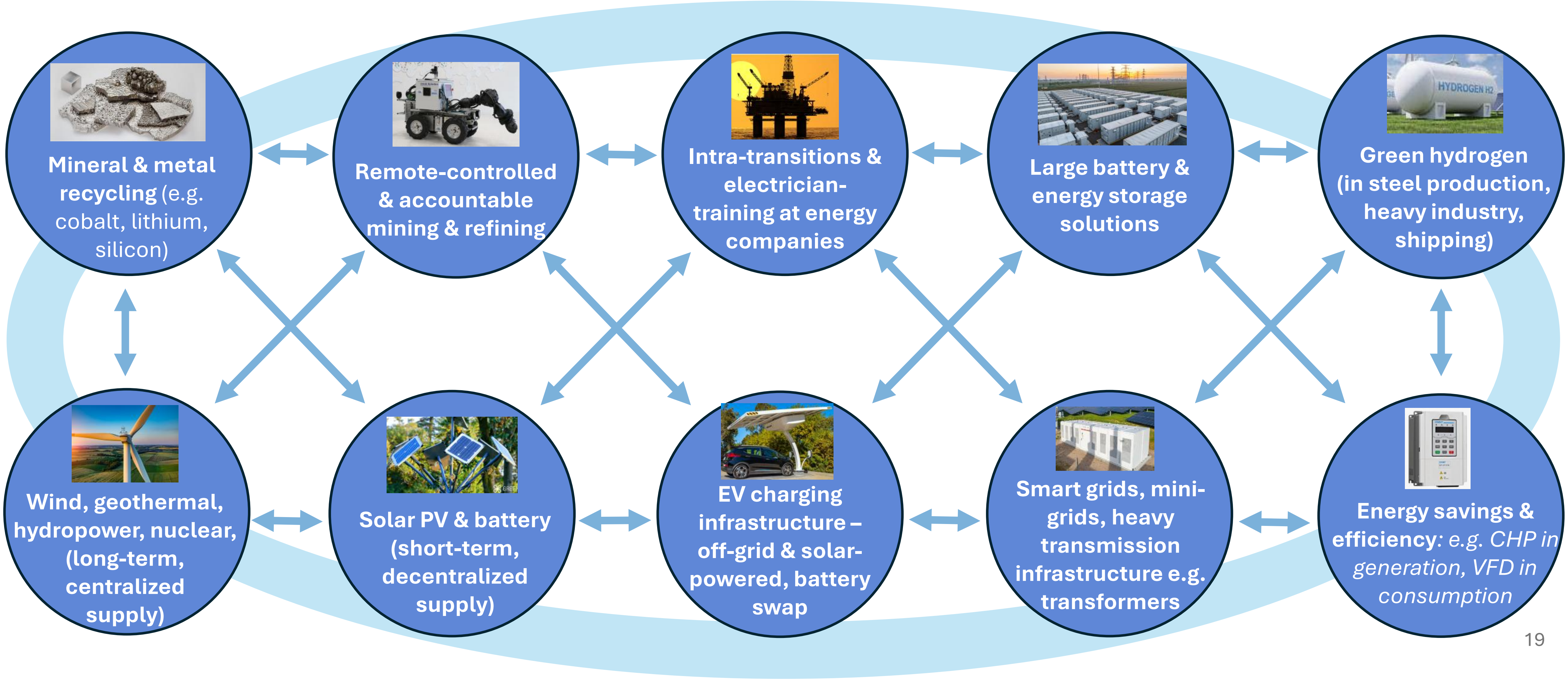
- **Permanent cooperative network** rather than only series of conferences, hosted by **governments of multiple countries**, guided by TAFF conferences (e.g. including Colombia, Netherlands, Ireland, Tuvalu)
- Simply put: **counterweight to OPEC**, but for ***whole value chain*** of **circular renewable energy systems**
- Includes promotion of selected **technological solutions** and **policy solutions** which can be **cascaded** across countries, governments, businesses, non-profits and universities
- Optimized efficiency of knowledge exchange helps to cascade solutions – **year-round** instead of **only annually at conferences**.
    - Example: If solution works in one country, it can be easily tested in other countries, with quick support and efficient knowledge exchange through peer problem-solving sessions
- Resources, e.g. to install remote-controlled robotic mining solutions for cobalt and lithium, can be distributed more easily to other countries. Such resources can include **patent buy-outs** and **venture catalysts** for e.g. **robotic mining solutions** or **new types of solar cells** or **battery production**

- **Incentives & Membership Bandwagon:** incentives make membership attractive to larger countries

Theory: Step 1

Circular Energy Systems: the path is clear.

Ten examples of <u>technology solutions</u> that an Innovation Accelerator can include to <u>upscale circular new energy systems</u> (most are already operational across the globe)*



**See Appendix 3 for 240 case studies*

Circular Energy Systems, with closed, circular supply chains, can be constructed worldwide – bringing energy security to all

Theory: Step 1

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Remote-controlled & accountable mining & refining provides first minerals & metals *(i.a. lithium, cobalt, silicon)*

Solar PV & battery: *short-term, decentralized suppply*

After 20-30 year lifespan, **up to 90%** of minerals are recycled & reusable in some installations*

Remote-controlled & accountable mining & refining

Large battery & energy storage solutions

Mineral & metal recycling (e.g. cobalt, lithium, silicon)

EV charging infrastructure *(off-grid, solar-powered)*

*For case studies, see Appendix

→ **Results:**

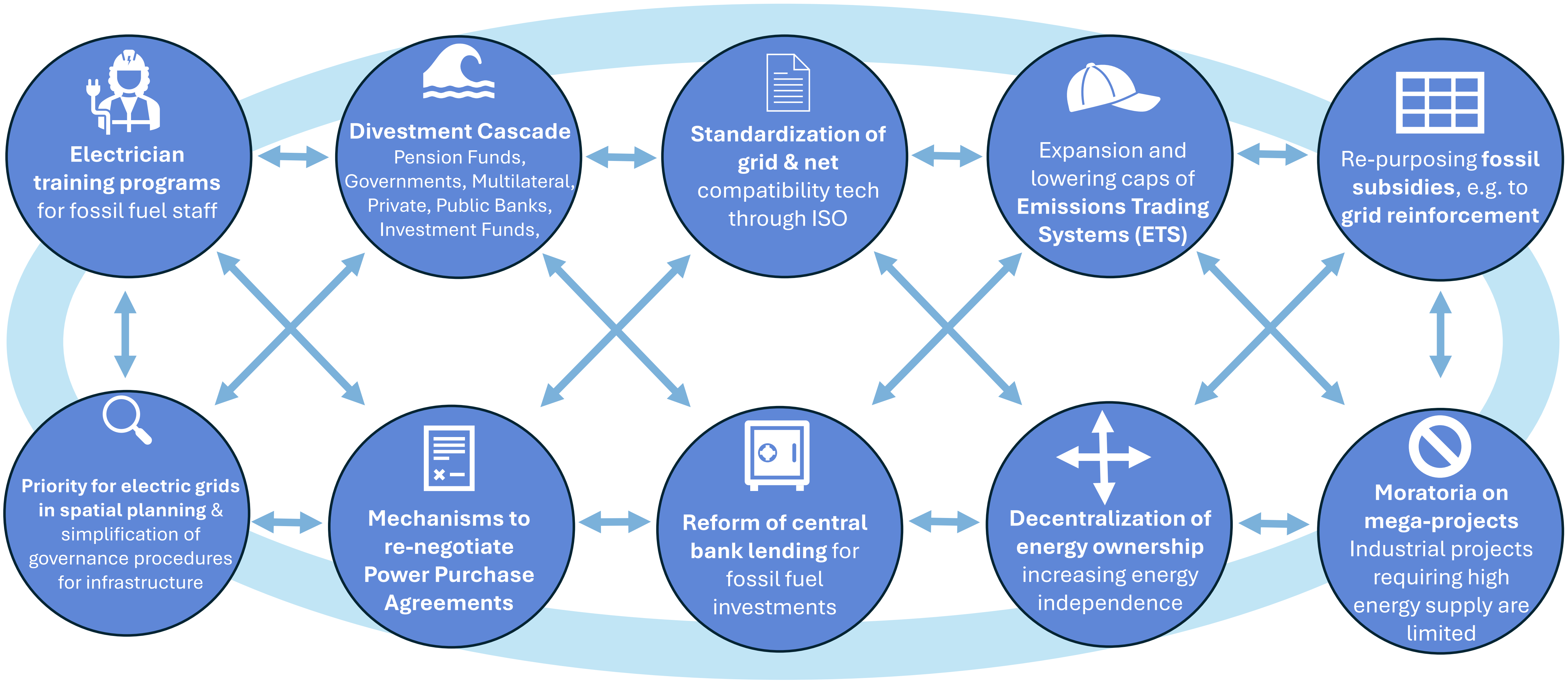
New Energy Systems:

- **Geopolitics:** Provide more **energy autonomy** & self-reliance (less reliance on imports)
- **Price:** Much cheaper than fossil energy
- **Climate:** >95% less heat-trapping gas emissions than FF
- **Circular**
- **Renewable**
- **Decentralized:** more community-ownable
- **People:** accountable
- **Nature:** accountable

Theory: Step 1

Policy Instruments: network members can cascade implementation

Ten examples of policy instruments that can cascade year-round among network members of Innovation Accelerator to optimize efficiency of implementation



Theory: Step 2

Intra-transitions by multi-billion dollar energy companies have been done successfully

Intra-transition =
Processes internal to energy companies to transition from producing & selling mostly (>60%) fossil fuels, towards mostly (>60%) clean renewables (solar, wind, and battery)*

*For more factors driving internal transitions of energy companies, see full version ft. Employees for our Future
*For energy transition in China, see full version

Company 'first wave'	Country	Ann. Rev. USD 2024	% Renewables now	Started intra-transition	Total Duration / Notes	Type	Listed?
Ørsted	Denmark	~$9.5 Bln	2019 85% renewables	2008 – 85% fossil fuels	11 years (21 yrs ahead)	Upstream (generation)	**Listed & ~50% state-owned**
Iberdrola	Spain	~$64 Bln	2025 80% renewables	2005 ~70% fossil fuels	20 years	Integrated (up & downstream)	**Listed**
NextEra	USA	~$25 Bln	2025 ~62% renewables	2002 ~60% fossil fuels	23 years	Integrated (up & downstream)	**Listed**
ERG	Italy	~$2.5 Bln	2023 >90% renewables	2008 > 90% fossil fuels	15 years	Upstream	**Listed**
EDP	Portugal	~$17 Bln	2024 >90% renewables	2007 > 80% fossil fuels	17 years	Integrated (up & downstream)	**Listed**

Theory: Step 2

Key Insights from Ørsted can be used by other companies

- Ørsted's intra-transition was result of **internal decision**, driven by:
    1. Growth strategy
    2. ETS price
    3. Understanding of climate science in C-Suite
    4. Pressure from stakeholders & shareholders
    5. Government support
- Transition funding came **largely from internal revenue streams***
- Staff's **offshore skillsets** from fossil tech were easy to **re-apply** in **offshore wind** → large share of offshore oil & gas staff now works in offshore wind projects
- Re-training for electrical engineering was manageable part of greater transition
- Ørsted collaborated with other local offshore wind projects to learn and drive down costs

*See Appendix 4

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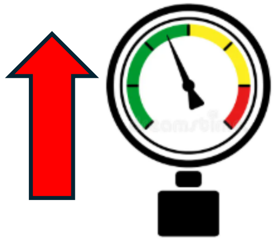
Theory: Step 2

From all directions, influence can grow on more (small) energy companies worldwide to implement intra-transitions – externally and internally

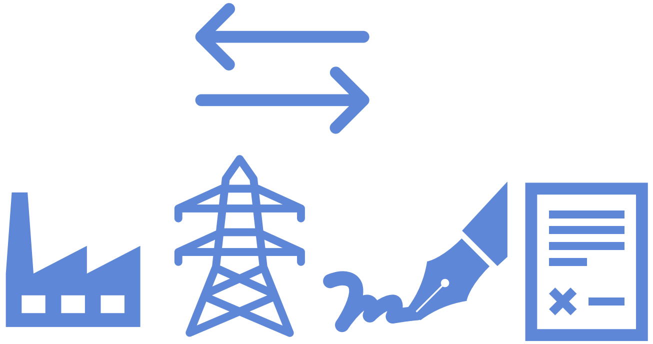
Learning from other companies, **influence to implement intra-transitions** is increased by coordinated **network** of:

- **Governments**
- **Employees**
- **Shareholders**
- **Board members**
- **Competitors & Suppliers**
- **Consumers**

Critical mass increases in C-Suite to **implement transition plans**



Decision is made (“*norm cascade*”)



Intra-transitions

Theory: Step 2

Financially successful intra-transitions can be done in three steps

Step 1
Prepare, Divest, Dismantle

- Create investment plans in clean energy alternatives e.g. offshore wind, solar & battery, energy trading, geothermal, green hydrogen
- Begin to redeploy capital towards alternatives
- Close old assets (don’t renew)

Key Investments

- Iberdrola closed 17 coal & fuel-oil power stations between 2001 and 2021, cutting scope 1 emissions by ~60% in five years

Step 2
Invest at Scale

- Commit multi-billion investment programmes
- Focus on offshore wind & solar as anchor technology
- Lock in long-term contracts (CfDs / PPAs)
- Use IPOs & green bonds to fund growth

Key Investments

- Ørsted pledged $20 bn in U.S. offshore wind infrastructure through 2030 — backing projects from Block Island to Revolution Wind
- Iberdrola invested £2.5 bn in East Anglia ONE (714 MW, 2019) and committed €5.2 bn to East Anglia THREE (1.4 GW, 2025)

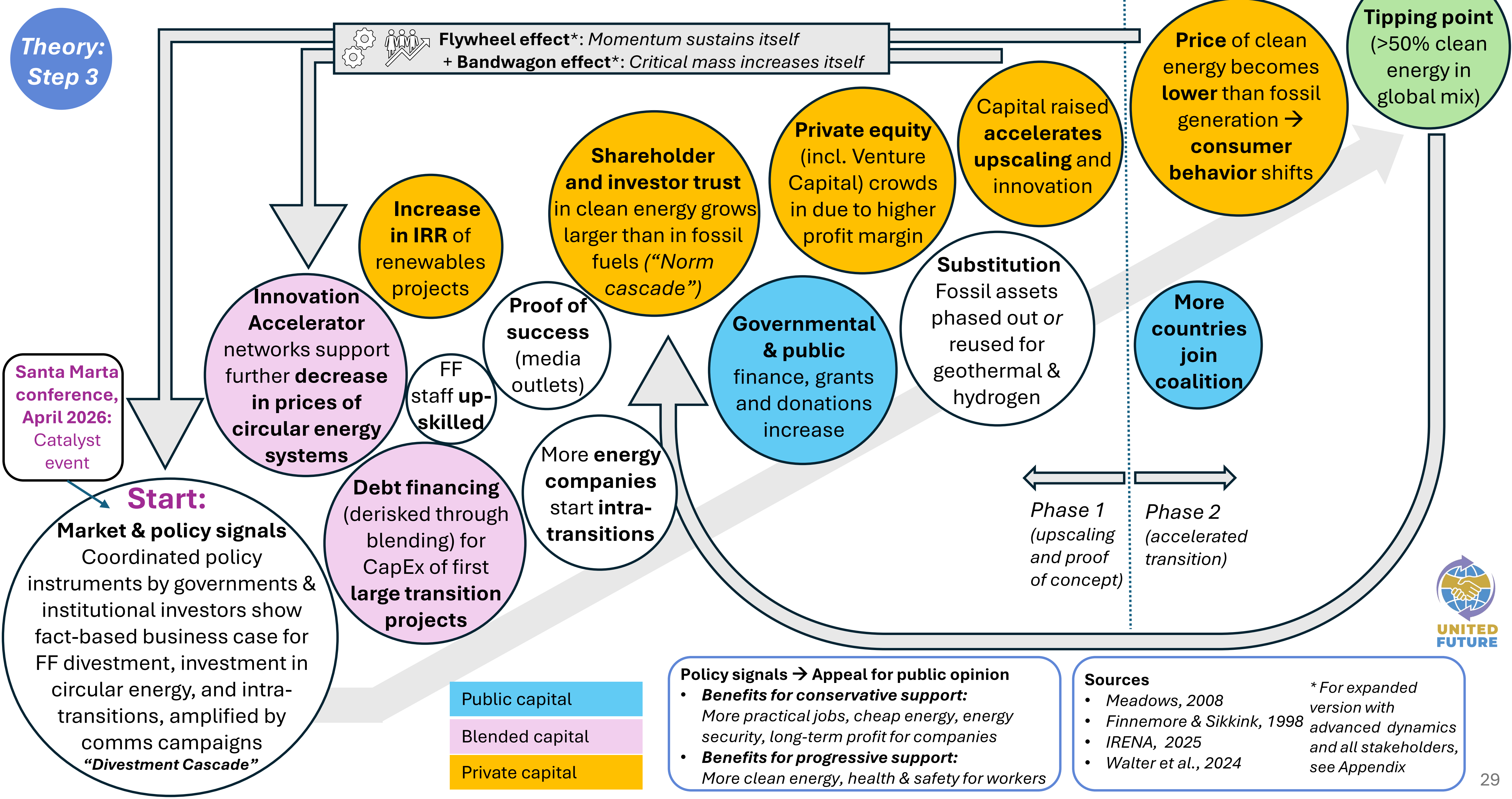
Step 3
Scale Internationally

- Expand internationally into high-growth markets
- Build grid & smart-network infrastructure
- Establish global renewable capacity targets
- Drive down costs via scale & innovation

Key Investments

- Ørsted reached >99% renewable generation by 2025 — the world's first large utility to complete a full green transformation
- Iberdrola surpassed 58 GW of clean capacity by end-2025, serving 100 m customers across 16 countries

A self-reinforcing feedback loop can accelerate process to "tipping point" in worldwide energy mix



Policy signals → Appeal for public opinion

- ***Benefits for conservative support:***
  More practical jobs, cheap energy, energy security, long-term profit for companies
- ***Benefits for progressive support:***
  More clean energy, health & safety for workers

Sources

- *Meadows, 2008*
- *Finnemore & Sikkink, 1998*
- *IRENA, 2025*
- *Walter et al., 2024*

** For expanded version with advanced dynamics and all stakeholders, see Appendix*

Theory: Step 3

S-Curve: path to cheaper energy systems, on track for 2.0 °C Paris target

Example feedback loop result (simulation). Intra-transitions of energy companies → replacement of FF in global energy mix

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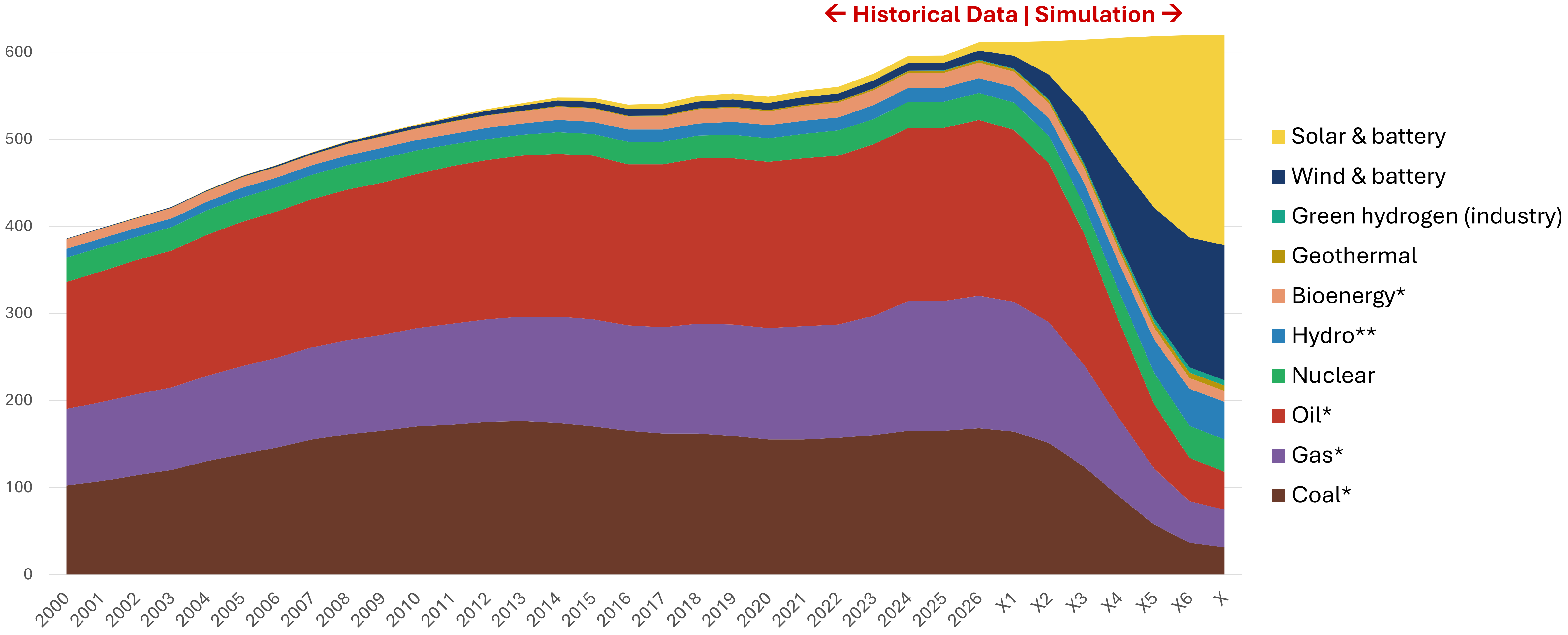
Primary energy production by source, World: Simulation

Measured in exajoules (EJ). Includes all end uses: transport, heat, industry & electricity.



* *With point source carbon capture (filtering) where possible*

** *With eco-friendly systems for river wildlife*

Data source: Energy Institute Statistical Review of World Energy (2025) – historical data 2000-2026; United Future – simulation (X1–X)

Theory: Step 4

Mobilizing capital at scale to accelerate a win-win energy transition

How the feedback loop transition process can be funded

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Phase 1 (Upscaling and proof of concept)	**Shared public funding agenda for innovation accelerators** Participating governments align priorities across existing national, EU, and multilateral funds, with focus on the full set of solutions to include in the Innovation Accelerators.	**Additional private and public finance for innovation accelerators** Private R&D funds of energy & electricity companies + new public funds are deployed for the development of the Innovation Accelerators.	**Blended finance for initial intra-transitions** Public and multilateral financial institutions (e.g. World Bank, EIB, etc.) provide concessional finance, guarantees, and other instruments to derisk private capital and support the first transitions.
Phase 2 (Accelerated transition)	**Private capital mobilisation at scale for follow-up intra-transitions** Once proof of concept is achieved, major private investment institutions with patient capital (e.g., pension funds) provide equity and debt financing to multiple energy companies for the transition	**Public–private partnerships for decommissioning** PPPs manage repurposing parts of fossil fuel infrastructure and other fossil fuel assets	

Public capital

Private capital

Blended capital

Conclusion: we can accelerate an international energy transition and create win-win benefit for all

++
- **People working in fossil fuel industry:** long-term job security and easier transition to clean energy
- **People working in mining:** advances in solutions to make mining safer and more accountable
- **Nature:** faster decline in heat-trapping gas emissions and air and plastic pollution
- **Indigenous communities:** recycling reduces extraction of metals from indigenous lands
- **Consumers:** lower energy prices long-term
- **Progressives:** cleaner energy supply, safer & healthier conditions for energy employees
- **Conservatives:** cheaper energy, national energy independence, business long-term financial stability
- **Countries worldwide:** energy generation is enabled domestically at low cost

Theory: Step 4

Action to implement in 2026

- Top-4 short-term policy recommendations to implement in 2026 - *for governments in TAFF coalition*

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1. **Establish permanent cooperative network, hosted by governments (Innovation Accelerator)**
Coordinate permanent network, hosted by governments of TAFF coalition, to **upscale and reduce costs of alternative circular energy systems**, as counterweight to OPEC. E.g. "Organization of Renewable Energy-oriented Countries (OREC)" – connecting existing initiatives in addition to series of conferences. Companies & non-profits can become members.

2. **Facilitate upscaling of new energy systems within cooperative network (Innovation Accelerator)**
Within this new network, governments and non-profits begin to set up **efficient communications** among all companies and non-profits producing circular, alternative energy systems, in **pre-competitive space** to facilitate optimal exchange of data for trial & error in upscaling (low-cost). Additionally, begin to create pooled funding for (1) **patent buy-outs** and (2) **venture catalysts** for under-scaled technological solutions to further reduce prices of alternative energy systems, includes recycling technology for batteries, lithium & cobalt.

3. **Divestment Cascade**
Year-round, governments & institutional investors **publish coordinated series of detailed plans** to **divest from fossil fuels** and **invest in alternative energy sources**, sending signals to **capital markets** and stock exchanges, **disrupting investor & shareholders trust** in fossil fuels.

4. **Intra-transitions of energy companies**
For governments of countries hosting fossil fuel companies: raise financial pressure on fossil fuel companies to accelerate intra-transitions (citing proof of success from Orsted and Iberdrola and IRR risk for shareholders as of 2030). **Work with employees of fossil fuel companies to change decision-making from within, following a structured approach.** Provide **electrician training programs for fossil fuel staff**. Include pressure to decommission or repurpose old fossil fuel assets.

How to contribute

At low cost, actors in public and private sectors can help energy mix of >50% renewables arrive earlier
- possibly several years earlier than on current trajectory

Possible contributions by:

→ Governments in TAFF coalition
Join co-development of plan for Innovation Accelerators, to reduce costs and upscale solutions i.a. **mineral & metal recycling**, **remote-controlled mining**, **EV charging stations**, and **cable & smart grid infrastructure**
→ completing decentralized & circular new energy systems internationally

→ Policy-makers
Coordinate cascade of policy instruments and divestment plans, sending signals to capital markets to divest from fossil fuels, and invest in renewables

→ Institutional investors
Publish detailed **divestment plans** to divest from fossil fuels and invest in renewables, because of rising IRR of solar & battery

→ Experts in i.a. energy, finance, economics, academia
Provide feedback on this theory of change

If we act on this shared theory now, chances to **avoid worst-case climate tipping points**, are increased, with benefit to all

Contact us

- **Where:**
  To help or get more information,
  → **Email** us at energy@unitedfuture.earth
  → **Message** Thij van Aalst, Gretel Gambarelli, or Lucy Buchanan on **LinkedIn**
- **Who:**
  We are an open think tank network of 100+ professionals in i.a. energy, finance, sustainability, academia, and politics
  (coordinated by former United Nations employees)
- **What:**
  We are developing an interdisciplinary theory of change on how to accelerate the international energy transition with benefit to all, building consensus on a shared pathway among a broad coalition of actors