

# **POST-PANDEMIC RECOVERY: TOWARDS A MORE DIVERSE AND IMPACTFUL ENERGY TRANSITION**

**Learnings from the World Energy Covid Scenarios and  
World Energy Transition Radar**



## ENHANCED RECOVERY FROM CRISIS

Covid-19 continues to have a dramatic impact on the lives of billions around the world. To support energy leaders, the World Energy Council has developed a set of four impartial [World Energy Covid scenarios to 2024](#) – Pause, Rewind, Fast-forward and Re-record.

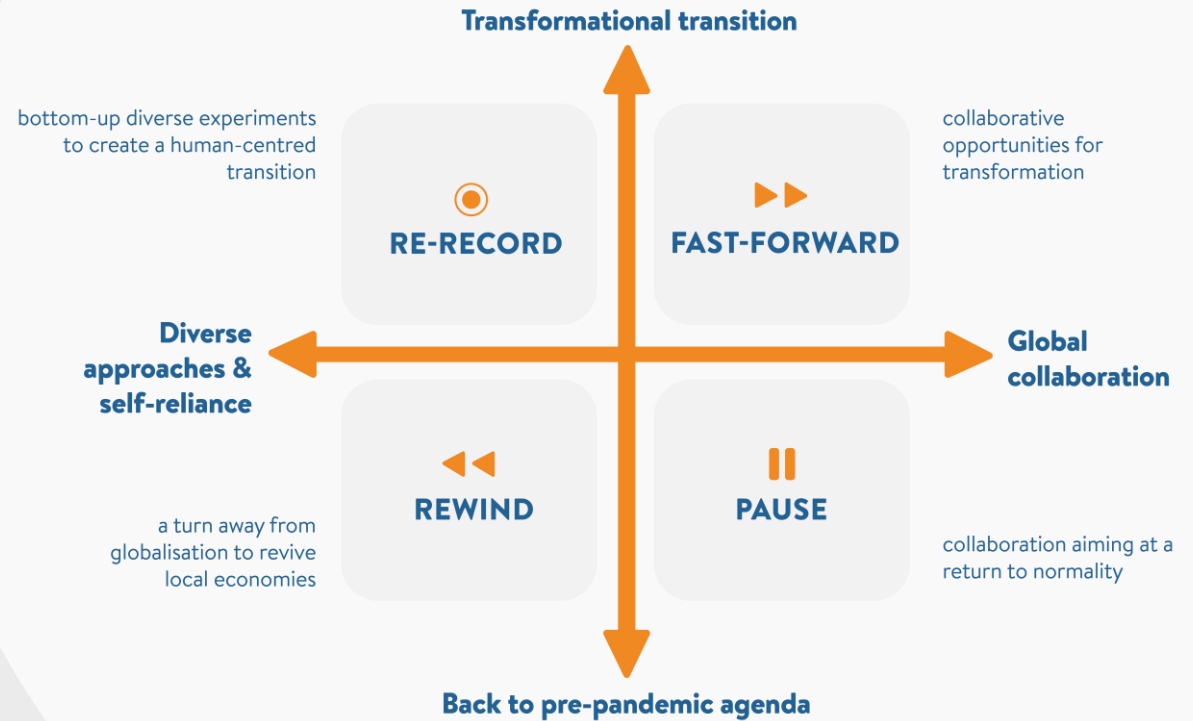
Each scenario explores three critical uncertainties – **ambition, trust and ability to control the virus** – and how these combine to shift the pace and direction of the global energy transition.

We have used these scenarios to build the world’s first [World Energy Transition Radar](#). It is an interactive tool that collates real time signals of recovery and actions from around the world.

**The World Energy Covid Scenarios and the World Energy Transition Radar can be used to:**

- Track signals of recovery and actions to **better understand** implications for the speed and direction of the energy transition;
- **Stress-test** and design better recovery strategies to tap into new opportunity and address emerging challenges;
- Forge a **common ground** among diverse stakeholders to create a shared understanding of the future and drive transformative action together.

*World Energy Covid Scenarios framework*



## WHAT SIGNALS WE ARE SEEING

More than **3,100 signals** were detected from mid-June to December 2020 by the Council's global community in more than 85 countries.

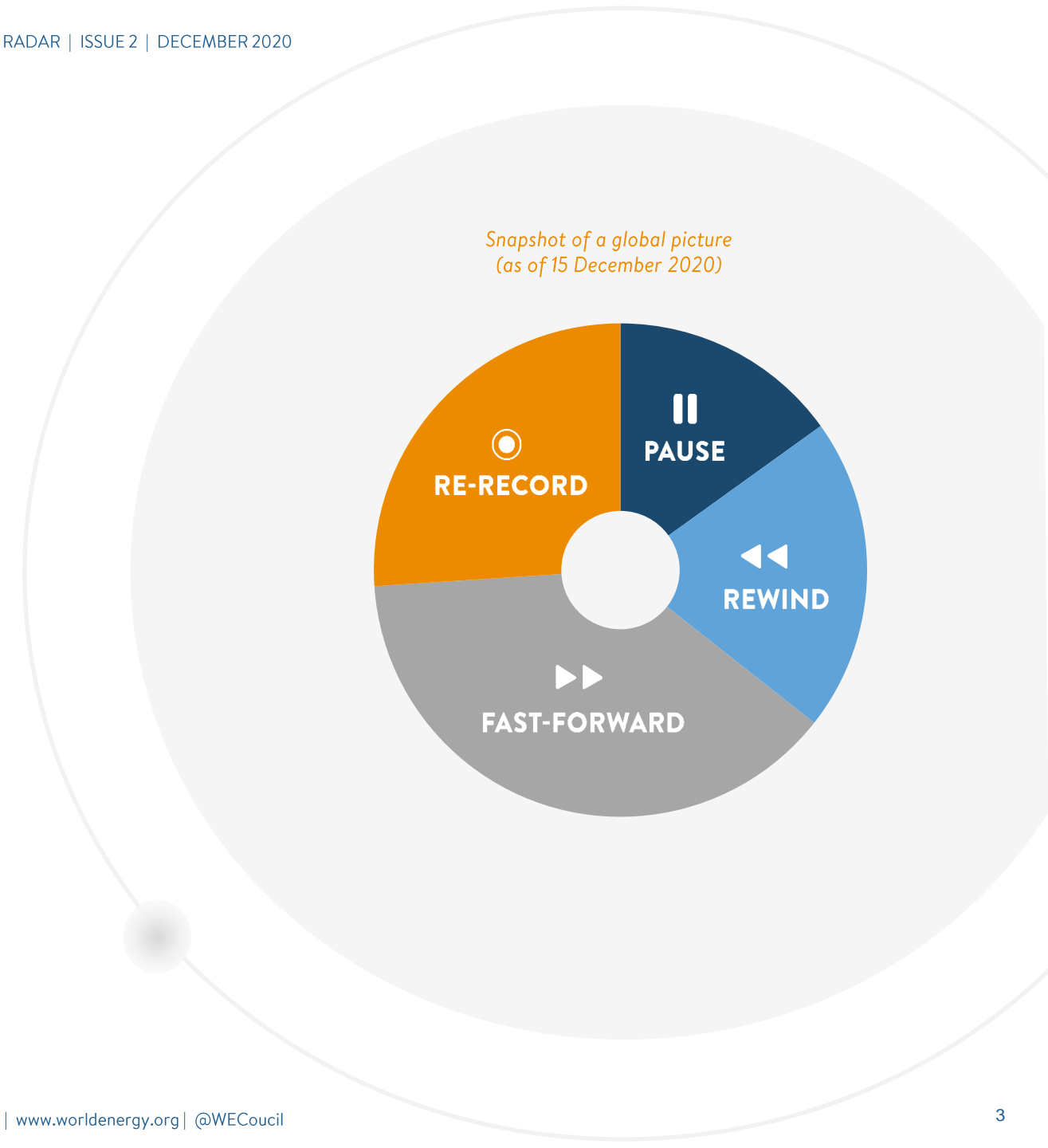
With fundamental changes happening around the world in the last nine months, signals increasingly indicate that there will **not be a return to normal** (less than 15% of all signals). While some activity and energy demand has returned as countries eased containment measures, uncertainty remains.

**64%** of signals indicate that countries are taking this time of crisis as an opportunity to **build back better**. Some are adopting collaborative approaches in this ambition while others rely purely on their own local resources. A key question remains as to how governments and businesses can sustain transformative approaches in the long run and turn visions and pledges into actions.

Three insights emerged in the last months as many countries have entered the second wave of pandemic:

- Uneven economic recovery
- Risk of fragmentation
- Push for net-zero firms, cities and communities

Interested in the first insights from the World Energy Transition Radar? Check the [first brief](#) issued in September 2020.





## UNEVEN ECONOMIC RECOVERY

Although there are signs of a return of consumer and economic activity in parts of the world where the virus has been largely contained, recovery is still highly unstable.

New waves of the pandemic mean health emergency and government restrictions continue to impact everyday life in many parts of the world.

The expectation of mass manufacturing and distribution of a vaccine in 2021 are driving mixed speculations from investors on recovery.

- ‘Asia Pacific is set to recover from its worst recession’ ([BBC](#))
- ‘South Korea expected to have emerged from recession in ‘better shape than G-7’ ([Bloomberg](#))
- ‘A recovery is taking shape but it is extraordinarily uneven’ ([Economist](#))
- ‘Covid-19 second wave pushing UK to brink of double-dip recession’ ([The Guardian](#))
- ‘China has seen some recovery, but there is no improvement on a year-on-year basis’ ([CNBC](#))
- ‘Around the world, faith in the economy is falling and fast’ ([WEF](#))
- ‘Investors look to scientists and data from vaccine for signs of hope but need to prepare for a difficult road’ ([Bloomberg](#))



## RISK OF FRAGMENTATION

The global outbreak severely tested international crisis management systems. Some countries are using this time to shift their geopolitical power.

However, while the pandemic might worsen some tensions internationally, it may also create opportunity to improve others.

Whether Covid will accelerate pre-existing trends, or be a geopolitical game-changer, is still a question.

- ‘U.S. approach to China may change, but rivalry will remain’ ([Bloomberg](#))
- ‘Japan helps 87 companies to “exit China” after pandemic exposed overreliance’ ([The Washington Post](#))
- ‘Azerbaijan warns of risks to Caspian energy exports from conflict with Armenia’ ([Reuters](#))
- ‘Rising tension with China rings corporate Australia’s alarm bells’ ([Financial Times](#))
- ‘Egypt, Sudan, Ethiopia deadlocked on Nile dam in new talks’ ([National Post](#))
- ‘Britain’s worsening relations with China’ ([BBC](#))



## NET ZERO-CARBON FIRMS AND CITIES

Crisis has triggered more companies to pledge to reach net zero emissions.

More companies are sharing best practices and learnings to help everyone move forward and to close the gap between pledges and action.

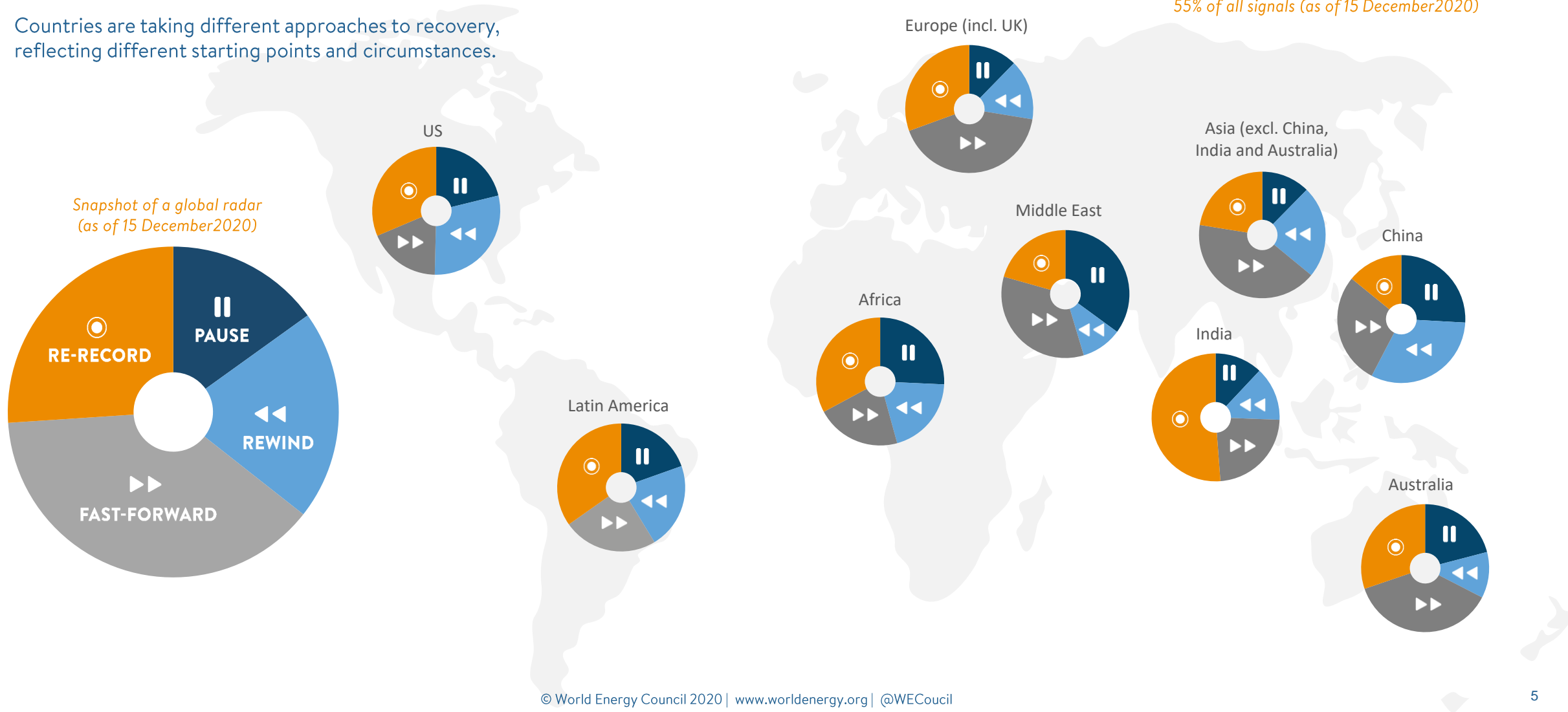
Cities are also taking a new agenda focusing on health, clean air and new jobs for post-Covid recovery.

- ‘Maersk heads zero-carbon drive in shipping sector with \$60 million research center’ ([Reuters](#))
- ‘Alliant Energy to operate at 100% net-zero emissions by 2050’ ([Utility Dive](#))
- ‘Poland’s largest oil refiner and retailer commit to climate neutrality by 2050’ ([Euroactiv](#))
- ‘Big Australian polluters band together to plan how to achieve net zero emissions by 2050’ ([ABC](#))
- ‘How Latin American cities are taking sustainability to the streets’ ([Positive News](#))
- ‘Mayors of 96 cities launch clean energy initiative’ ([Energyworld](#))
- ‘European cities are turning Nature Based Solutions to improve citizens’ quality of life, urban climate & water resilience’ ([Euronews](#))

## REGIONAL AND NATIONAL SIGNALS

Countries are taking different approaches to recovery, reflecting different starting points and circumstances.

*Snapshot of regional radars. Regional signals represent 55% of all signals (as of 15 December 2020)*





## INDIA

Signals picked up by our community indicate that a Re-record scenario (51% of signals) has begun to dominate in India. It focuses on local and transformative recovery through a greater bottom-up approach, a renewables revolution and small scale innovation. Three trends are shaping recovery plans:

### Boost of solar generation as a path to increase self-reliance

In line with appeals to push for self-reliance and reduce imports, the Indian government has set ambitious targets for the next decade and announced initiatives focused on the establishment of solar manufacturing facilities. However, while India continues to bet big on renewable energy ambitions, it has no plans to give up coal.

- ‘Modi’s government is targeting 175 gigawatts of renewable capacity by 2022’ (*Bloomberg*)
- ‘India set to propose world solar bank & mobilize \$50 billion in solar funding’ (*News Break*)
- ‘PM Modi vows to more than double India’s non-fossil fuel target to 450 GW by 2022’ (*TheHindu*)

### Strong support of entrepreneurs and start-ups

India has a vibrant start-up ecosystem. Throughout the Covid outbreak, it has demonstrated a resilient tech industry. The government has been pushing the ‘Made-in-India’ agenda which favours more entrepreneurship.

- ‘India can soon be the tech garage of the world’ (*Mint*)
- ‘Odisha Govt to help MSMEs facing financial stress due to pandemic’ (*Menafn*)
- ‘Government-Backed Schemes Support Aspiring Women Entrepreneurs’ (*Makers India*)

### City level transformation

To encourage the rapid adoption of electric vehicles, including Ebike taxis, E-rickshaws and E-autos, the government is focusing on forward-looking policies which include strong incentives for consumers, manufacturers, charging providers and the EV ecosystem. Cities also promote the use of non-conventional energy to cut down on the consumption of conventional energy.

- ‘India’s Telangana Approves Ground-Breaking EV Policy’ (*CleanTechnica*)
- ‘Kolkata: Solar trees to light up pavement, park at township’ (*Energyworld*)
- ‘Indian railways gears up to become “Green Railway” by 2030’ (*Energy World*)



### EMERGING LEADERSHIP QUESTIONS

- How can India’s current approach balance the need for rapid recovery with **long-term resilience**?
- How do countries shape **new demand** for clean energy solutions by enhancing affordability while avoiding the trap of long-term subsidies?
- How can India address **social challenges** and the costs to society of a faster transition from coal – jobs losses, stranded assets, etc.?



## EUROPE (EU & non-EU)

Signals from Europe shared by our community indicate the strong emergence of a Fast-forward scenario (50% of signals). The region is taking this crisis as an opportunity for transformation and setting ambitious targets for green recovery. Three trends are shaping recovery plans:

### Drive for climate neutrality and system innovation

Europe as a whole is striving for a better recovery from the impacts of the pandemic. EU-specific long-term strategy is focussed on a combination of the EU Green Deal and a strengthening of the EU Single Market. It drives collective actions on various levers of change and includes policies to promote innovation, finance and citizen engagement. The UK is making ambitious pledges in advance of COP 26.

- 'The Europe's recovery post-Covid-19' ([Europe.eu](#))
- 'Deep demonstrations' ([Climate-KIC](#))
- 'UK Government supports green recovery' ([Gov.UK](#))

### Enabling greater consumer engagement

As a pathways for transformation, the region is taking initiative to empower consumers to play an active role in the green and digital transitions. The Just Transition Fund and Skills Agenda for Europe aim to support re-skilling, helping businesses create new economic opportunities.

- 'Commission targets EU skills boost for green and digital transitions' ([Euractiv](#))
- 'Empowering consumers and ensuring better protection' ([Europa.eu](#))

### Hydrogen momentum

European stakeholders recognise the role that hydrogen can play in decarbonising energy systems and hard-to-abate sectors like industry, shipping and heavy transport. The question would be how to generate demand side pull and create a level playing field across different countries.

- 'EU announced hydrogen strategy' ([Europa.eu](#))
- 'UK Government has announced £139m to drive decarbonisation by supporting hydrogen' ([Gov.uk](#))
- 'Green energy giants team up to launch Renewable Hydrogen Coalition' ([Business Green](#))
- 'New Russian association formed to develop hydrogen technologies' ([H2 View](#))



### EMERGING LEADERSHIP QUESTIONS

- How can the **costs to society** associated with faster paced energy transition be managed and fairly distributed?
- How will the **new geopolitics of clean energy**, which include the value chain of rare earth and other non-energy materials as well as cyber security concerns, impact the renewable revolution?
- How is **market design** changing to enable new business models emerging in response to a faster paced transition and 'who' is the appropriate regulator?

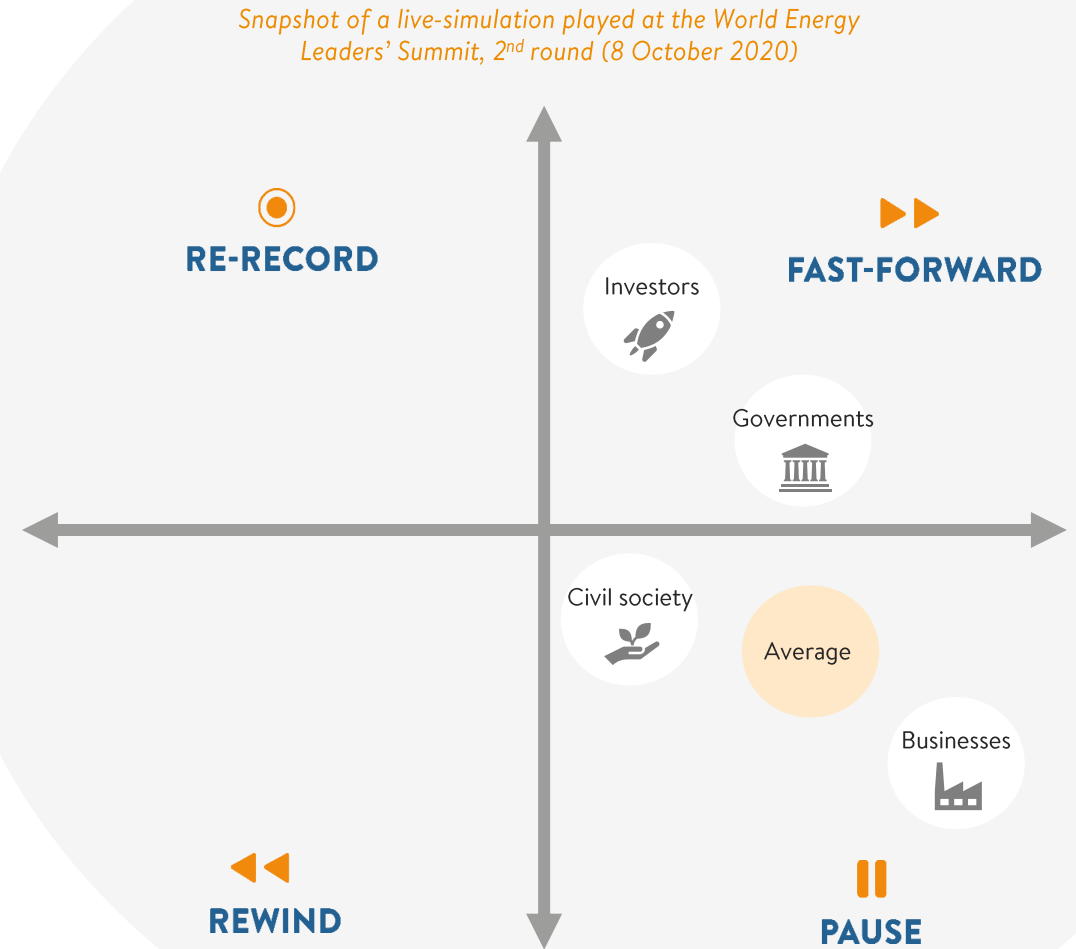
## PRACTICAL STRESS TESTING OF RECOVERY STRATEGIES

To help leaders stress test their recovery plans, the World Energy Council has designed the Scenario Summit methodology based on World Energy Covid Scenarios and the World Energy Transition Radar.

The Scenario Summit is a **role-play live simulation** of recovery actions. It convenes energy leaders with ecosystem stakeholders – governments, investors and civil society – in a private dialogue and provides a safe space to exchange learnings on recovery plans and better understand implications of collective actions on energy transition.

The pilot in October with the World Energy Council’s CEO and Ministerial community has revealed the following insights:

- The **levels of human ambition and collaboration** will shape recovery from crisis and, in turn, determine the pace and direction of global energy transition;
- The **breadth and complexity of collaboration** is changing with more recognition of the need to engage not just technology producers, but also consumers – cities, citizens, and local communities – in the process of transformation;
- Greater **leadership courage** is needed to close the gap between individual aspirations and collective actions and outcomes.





# METHODOLOGY

## WHAT IS A SIGNAL?

A signal is an event, disruption, local trend or a break in an existing trend. As an example, it could be a new technology coming into the market, new policies introduced by governments, or a new product or local innovation with potential implications for the energy sector. It is something that catches your attention when you read news, reports, and corporate or policy statements.

## WHAT DO WE SCAN?

The World Energy Transition Radar is a data-driven tool that collates real-time signals of recovery that have potential to impact energy markets and speed and direction of energy transition on global and local scales.

## HOW DO WE SCAN SIGNALS?

The World Energy Transition Radar captures signals shared in social media with unique scenario hashtags or submitted via a special form on the radar web page. Signals can be found in news reports, articles and other information outlets. Collated signals are moderated and further aggregated by type – political, economic, social, technological and environmental.



### Would you like to contribute to signals scanning?

Post in your social media signals you are noticing and add relevant scenario hashtag

**#WEpause, #WErewind, #WEforward, or #WErerecord**

## ABOUT THE WORLD ENERGY COUNCIL

Formed in 1923, the World Energy Council is the world's leading member-based network of global energy transition leaders and practitioners.

The not-for-profit organisation represents the world's only truly impartial and technologically neutral energy community.

Globally networked and locally strong, we work dynamically across the entire energy spectrum with more than 3,000 member organisations in nearly 90 countries encompassing the public, private and academic sectors.

At the World Energy Council, we develop practical “how to” solutions and convene the global energy-plus community in support of our enduring mission: enabling access to clean, affordable and reliable energy for better lives and a healthier planet.



**Interested to co-shape a signals deep dive analysis or run a customised Scenario Summit with your team, national or regional stakeholders?**

Contact us at [scenarios@worldenergy.org](mailto:scenarios@worldenergy.org)

World Energy Council  
Registered in England and Wales  
No. 4184478  
VAT Reg. No. GB 123 3802 48  
Registered Office  
62-64 Cornhill  
London  
EC3V 3NH  
United Kingdom