

A vital transformation of global energy systems is underway

How COVID-19 is driving an historic reallocation
of investment in energy systems

Energy experts share their experiences and views on the implications of COVID for energy firms and systems

The world energy sector is experiencing unprecedented challenges. It is now clear that the COVID pandemic will have a fundamental impact on the pace and direction of global energy transition.

Recognising the imperative for an informed and impartial, value-adding voice in these fast changing circumstances, the World Energy Council has shared **key insights from its second-round global survey** conducted in May of the Council's global energy community.

GLOBAL SURVEY



**220+ RESPONSES
ACROSS 6 REGIONS
& 61 COUNTRIES**



Survey is being kept 'live' to enable tracking of fast-shifting perspectives of the global community. Findings in this document are based on responses received during May 2020

EXECUTIVE SUMMARY: A vital transformation in world energy systems is underway



GLOBAL IMPACT

The COVID-crisis is exposing pre-existing stresses and triggering a vital transformation in the process of global energy transition

- This is the second World Energy Council survey of its extensive network of energy experts from **61 countries** across **six continents**
- The crisis **impact is global** with consistent experiences regardless of region, though significant differences exist between sectors
- The crisis is reshaping the global energy transition – the share of the global energy community **expecting a new normal** has **more than doubled** since April¹
- Energy businesses are dealing with the crisis in three stages: **Respond – Rebuild – Recreate**
- The Council is working with all major players in the energy ecosystem to accelerate best practices in managing global energy transition for the benefit of all

RESPOND

Energy businesses are making major decisions in response to COVID

- Energy businesses are planning to or have already enacted drastic financial measures in response to COVID
- **A third** of energy companies plan to shed jobs. This may mean **350,000 jobs at risk** across **G7 economies**²
- An estimated **\$200-400bn** reduction is expected in **CAPEX**³
- **4-in-10** energy firms report cutting **operational expenses** by more than 10%
- **1-in-3** plan to **shut one or more business units**

People resilience is a key priority

- Around **60%** of respondents have adopted **new work patterns** and are providing both **physical and emotional support** to employees

REBUILD

#BuildBackBetter is well underway

- All energy sectors reported a **significant shift in investment** allocation
- Top priority for energy firms is **digitising business activities**, with **two-thirds** stating an intent to accelerate digital action plans
- A **refocus on innovation** for the era ahead, with **42%** reporting plans to increase **R&D** spend
- Nearly **half** (48%) plan to keep office based staff **working from home**

RECREATE

Two notable shifts - purpose & focus

- **Over 80%** are **shifting their business focus**. Energy firms across the globe have responded immediately to the new normal emerging from COVID
- **More than 40%** are **increasing ESG** – focused activities and investment
- Pressure is building from institutional investors around how energy firms operate in the future



SCENARIO PLANNING

All energy transition leaders can use impartial and plausible scenarios to enable global energy transition management

- The Council has built four **plausible scenarios** – **Pause, Rewind, Re-Record, and Fast-Forward** – with a time horizon of 18+ months
- Signals for all four scenarios are being detected, though the signals for **Fast-Forward and Rewind** are **starting to dominate**
- Used as a set, these scenarios can prompt better quality leadership conversation on the **reallocation of investments, exit strategies and policy pathfinding** needed to enable orderly global energy transition as the world emerges from crisis

¹ World Energy Council COVID Surveys April-May 2020 & May-June 2020 | ² ILOSTAT explorer www.ilo.org - 1.85% energy employment across G7 | ³ IEA of total energy capex 2018 \$1.8 trn, [World Energy Council analysis](#) | 1

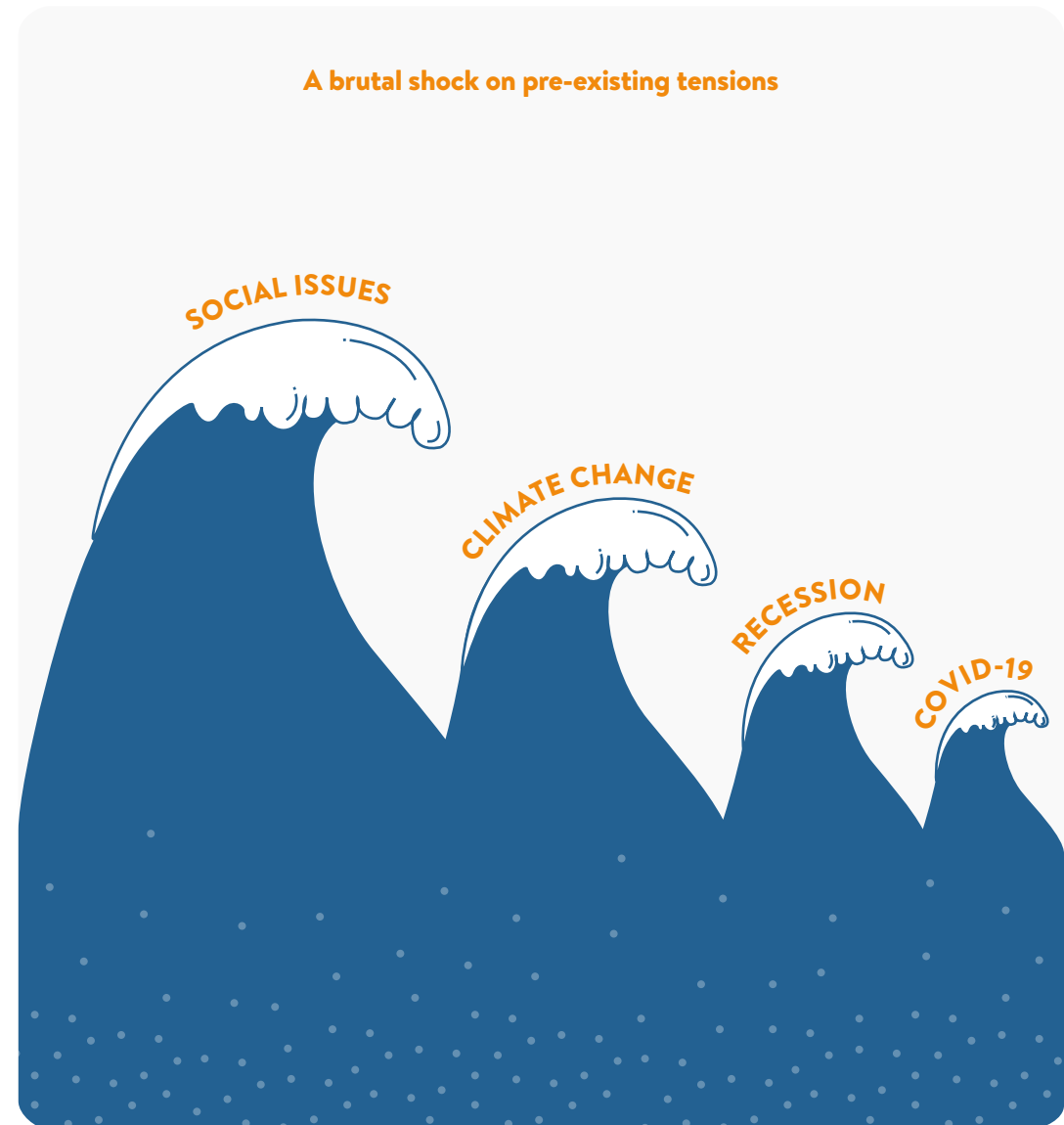
A PIVOTAL TIME FOR ENERGY TRANSITION

COVID has created a brutal shock to energy transition. The crisis has served as a stress test for the energy system, highlighting **the need for a broader approach to resilience** while exposing weaknesses in the business models of energy firms.

The crisis has also highlighted **the need for a novel and agile response** to a fast-moving situation. Global energy systems and players are **preparing for a new energy future in less than three months** for the first time in modern history.

In response to the crisis, the World Energy Council has identified a three-phased model being adopted by the global energy community:

- **RESPOND** – taking immediate action to manage through the extended period of crisis (*peak of impact in 3-6 months*)
- **REBUILD** – leveraging positive spillover effects of the crisis to build new capabilities and skills (*peak of impact 6-18 months*)
- **RECREATE** – emphasis on transformational action and working with a ‘new normal’ post-crisis future to manage the global energy transition (*peak of impact in over 18 months*)



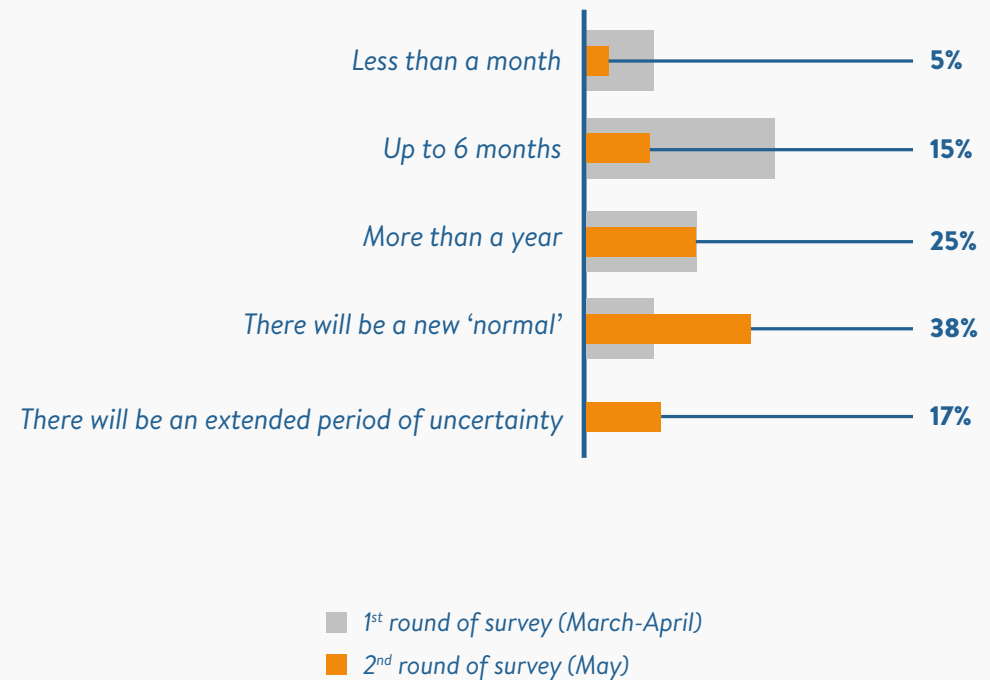
THE RAPID CHANGE IN OPINIONS ON A 'NEW NORMAL'

CHANGING EXPECTATIONS

More respondents expect a 'new normal' for energy systems than a month ago – 15% vs 38% (x2.5).

Regional diversity in views: While perceptions on new normal in Europe, Asia, Latin America and the Caribbean are in line with the global view (between 31% and 35%), the majority of respondents in Africa and North America (48% and 61%) do not expect a return to business-as-usual and believe that businesses need to adjust to a different post-pandemic future.

In your opinion, **how long will it take for energy systems to come back to normal?**



RESPOND | Drastic financial measures by 4-in-5 organisations, including cuts in CAPEX and OPEX



\$200-400bn anticipated reduction in CAPEX, based on pre-COVID estimates of total energy CAPEX¹. COVID has had a particularly **huge impact on O&G and major energy firms** (greater than \$500m sales) according to our global community survey.

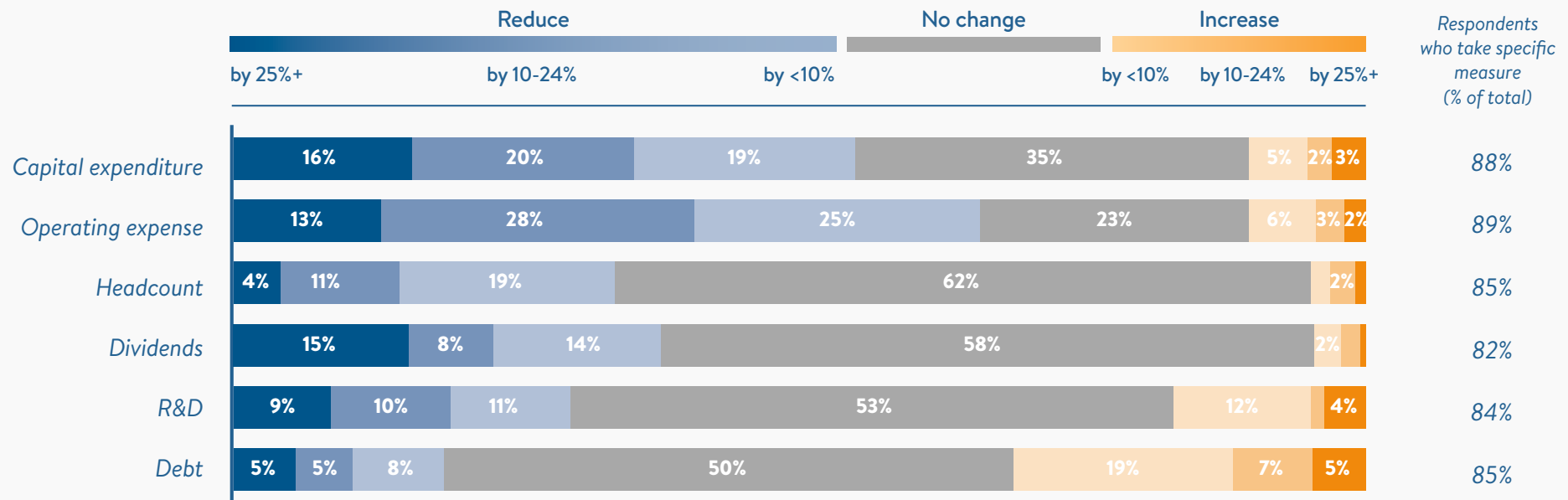


40% of organisations are reducing operational expenses by more than 10%. Similar to impact on capital expenditures, O&G firms are affected the most.



While **one-third** of firms plan to shed jobs, headcount is the **least impacted** operational area across all sectors. Employee **wellbeing** is at the top of the organisational agenda.

What **financial measures** are your organisation planning in response to COVID?



Source: ¹ Based on consideration of IEA Total energy capex 2018 \$1.8 trn, and World Energy Council analysis

RESPOND | Putting people first



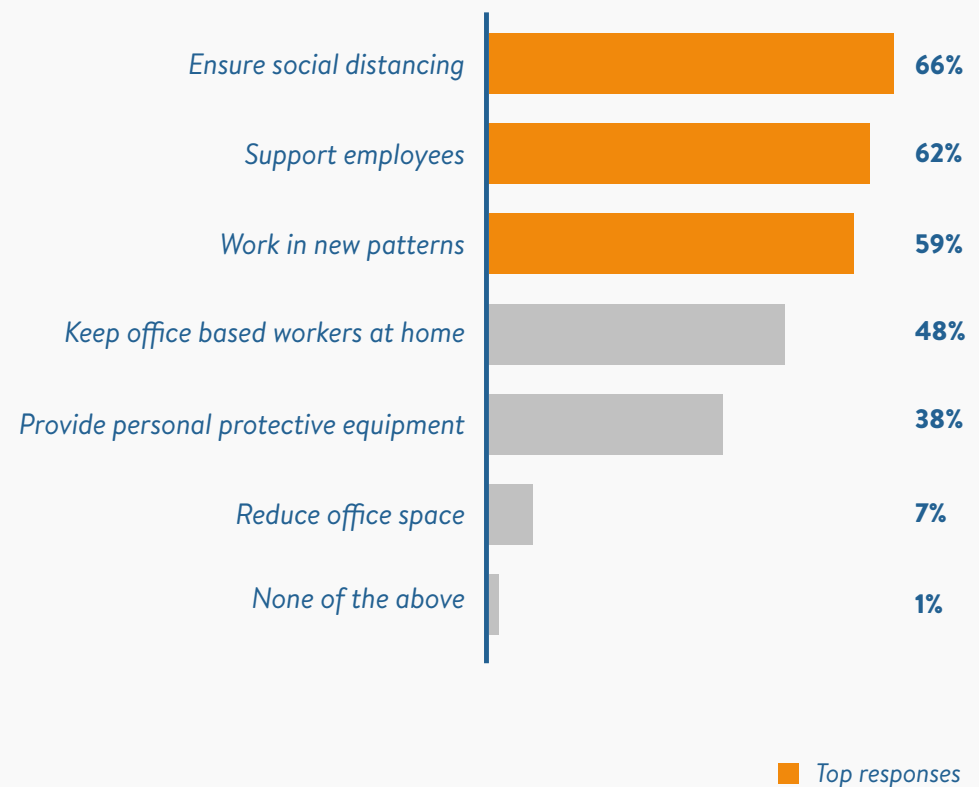
WELFARE OF EMPLOYEES IS AT THE TOP OF ORGANISATIONS AGENDA

66% of the organisations polled are expecting to ensure **social distancing** measures are in place for those who return to work, and **59%** plan to adjust to a **new working pattern**.

Organisations are paying the most attention to supporting employees and maintaining **emotional and physical wellbeing (62%)**.

Other considerations include evaluating **outsource possibilities** and changes to office planning to allow more employees to work remotely.

What are your top three initiatives for managing your **workforce** after the COVID lockdown?



REBUILD | 81% of organisations are shifting investment into digitalisation, R&D and ESG-focused activities

DIGITAL ACCELERATION

More than **two-thirds** of organisations are digitising their business. Digitalisation is also seen as a major **area for innovation**, focussing on business intelligence, remote communication and new services.

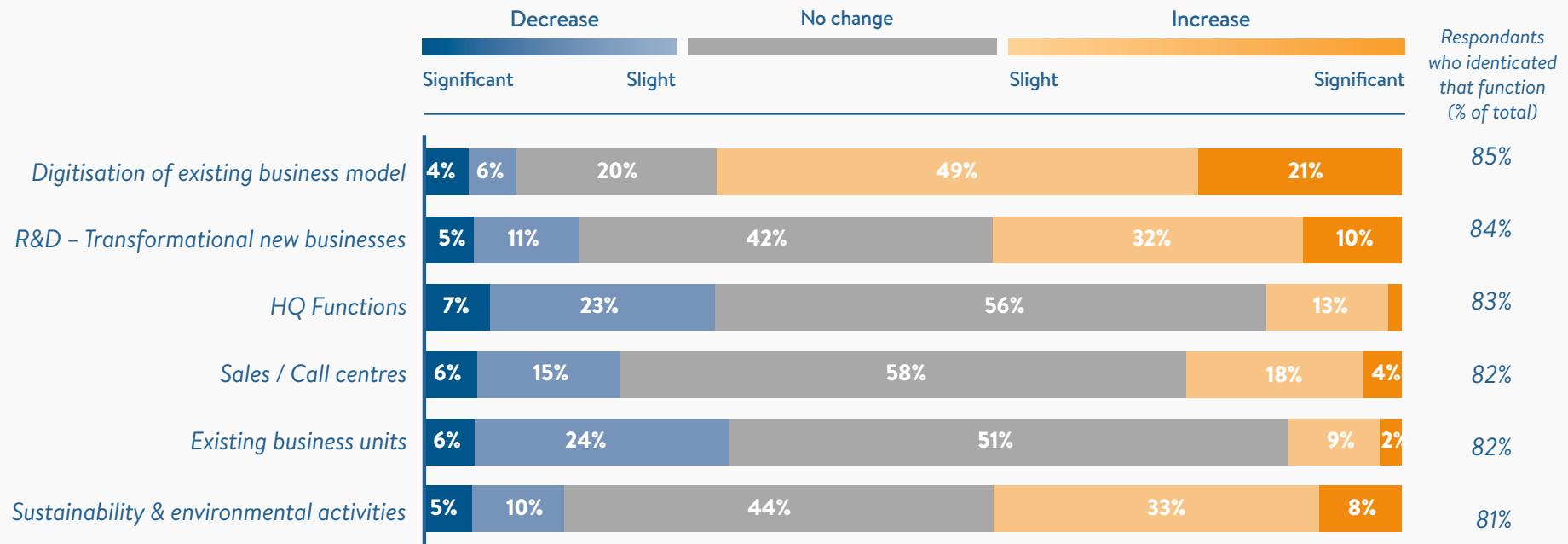
DRIVE FOR R&D

42% of organisations are **increasing R&D spend** into transformational new businesses. Technology, utility and distribution companies are the main investors in R&D.

SHUTTING BUSINESS UNITS

A dramatic change can be seen also in **closing business units** with **third of organisations** (30%) planning on shutting one or more business units.

How is your organisation **reallocating investment** to prioritise key functions in the business?



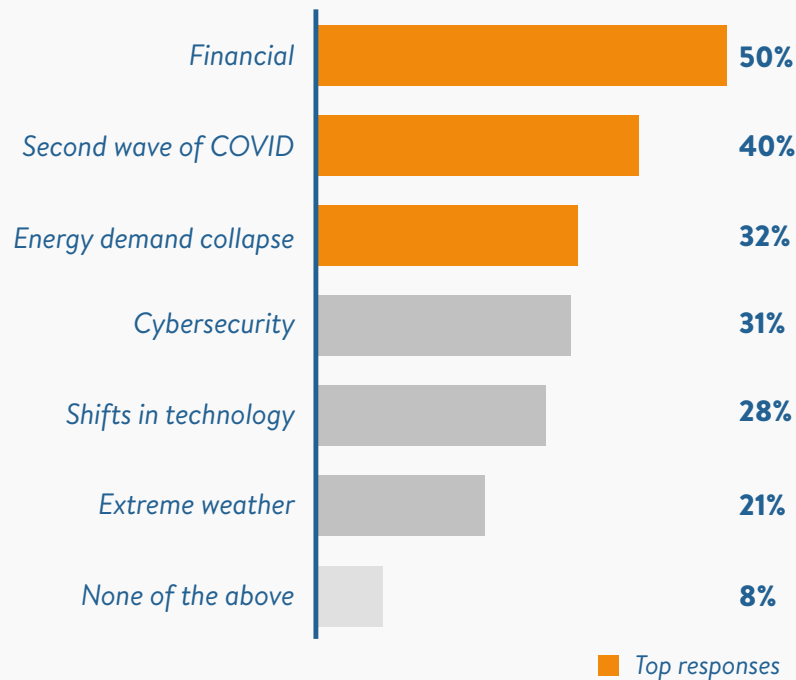
REBUILD | Most organisations are rethinking the risks and focusing on ‘whole system’ resilience



PREPAREDNESS FOR MULTIPLE / CASCADING SHOCKS IS CRITICAL

While organisations across all sectors are experiencing immediate impacts of COVID, **half** of them consider **financial risk** a major challenge and expect more uncertainty in the event of a **second wave of COVID / new pandemic** and are preparing for further **demand side disruptions**.

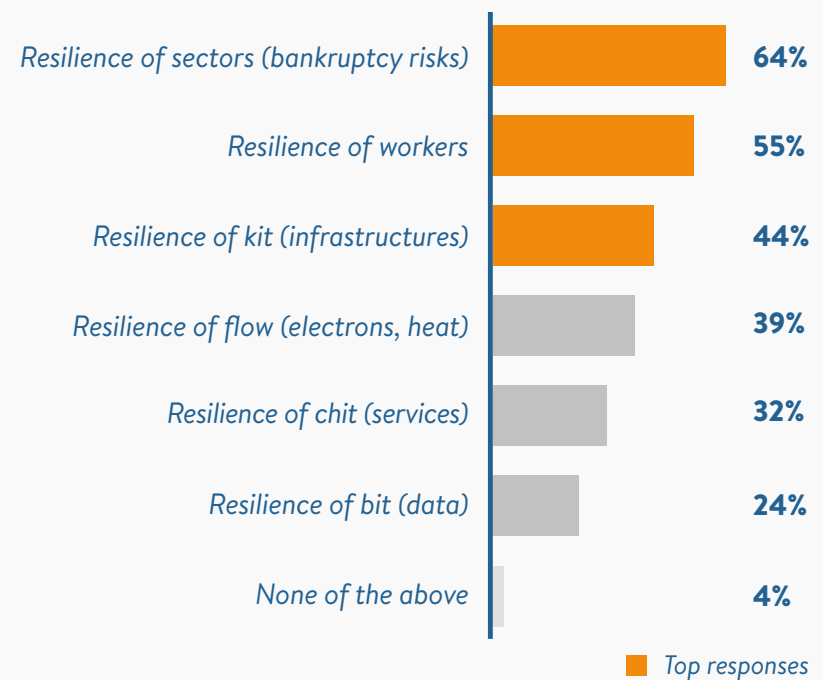
What are the **new global energy system shocks** your organisation and sector are least prepared for?



GOING BEYOND RESILIENCE OF FIRMS TO WHOLE SYSTEM RESILIENCE

Emotional and physical resilience of workers is considered by countries to be as important as the need to manage risks of individual firms’ bankruptcies and resilience of infrastructure. Building whole system resilience to multiple, simultaneous shocks is seen as a priority to manage future shocks.

What are the areas that your country is focusing on to **build a whole energy system resilience**?



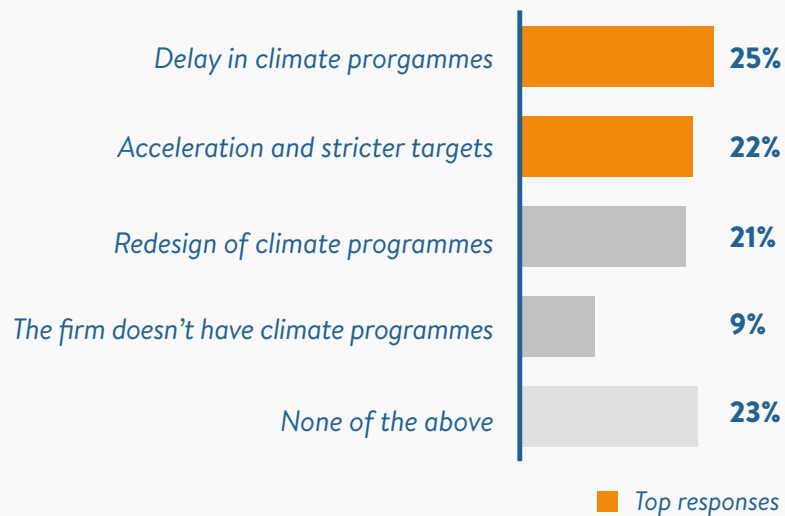
RECREATE | Action on global energy transition varies by firm and country

REDEFINING CLIMATE CHANGE RELATED PROGRAMMES

Almost a quarter (22%) of organisations are accelerating their climate programmes, by adopting **stricter climate targets** or shortening the time horizon for climate targets, while another quarter (25%) is **delaying** climate change programmes to prioritise maintaining cash flow. One third of big firms with over 500m turnover are redesigning climate related programmes.

More than **4-in-10** are **increasing investments in sustainability and Environmental, Social and Governance (ESG)** activities.

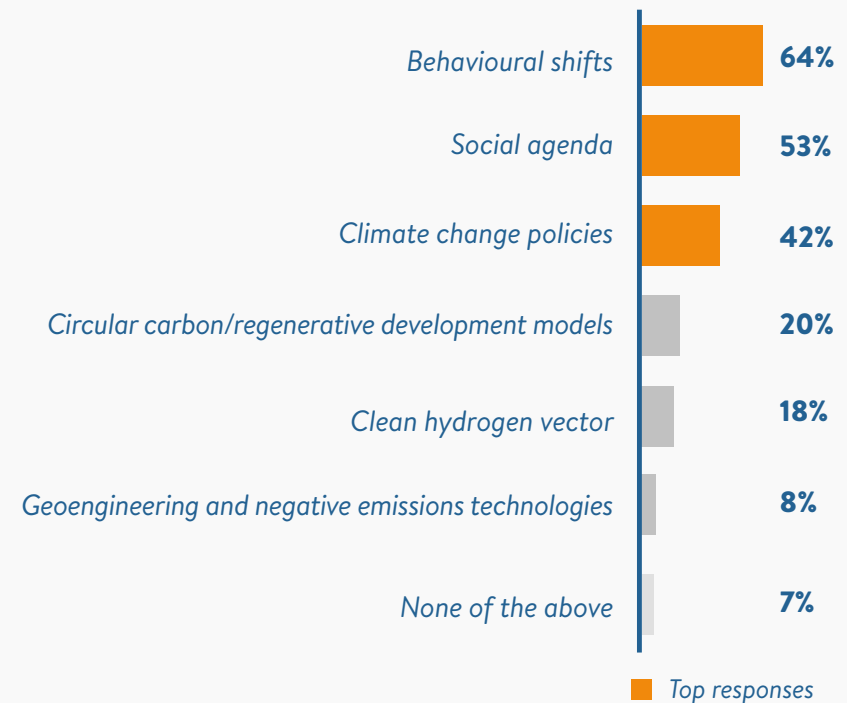
What are the new **global energy system shocks** your organisation and sector are least prepared for?



RADICAL / TRANSFORMATIONAL POLICIES TRIGGERED BY COVID

While climate change focus is an integral part of new policies, **social agenda and behavioral shifts** are considerations that players and governments are taking into account when designing radical and transformational policies as they learn from the COVID crisis.

How do you expect COVID will **change your organisational climate related programmes / (ESG)?**



PREPARING FOR A POST-PANDEMIC FUTURE TO ACCELERATE THE GLOBAL ENERGY TRANSITION

While no one can predict the future, organizations and governments can utilise scenarios to test and design exit strategies and navigate how to emerge from the COVID shock as a more resilient society and continue to accelerate a successful global energy transition.

The Council has built **four COVID-19 crisis scenarios – Pause, Rewind, Re-Record, and Fast-Forward** – to support energy leaders in stress testing and designing exit strategies.

As indicated by our survey, all four scenarios are seen as **plausible** by the energy community with significant **impacts in the next 18+ months**.

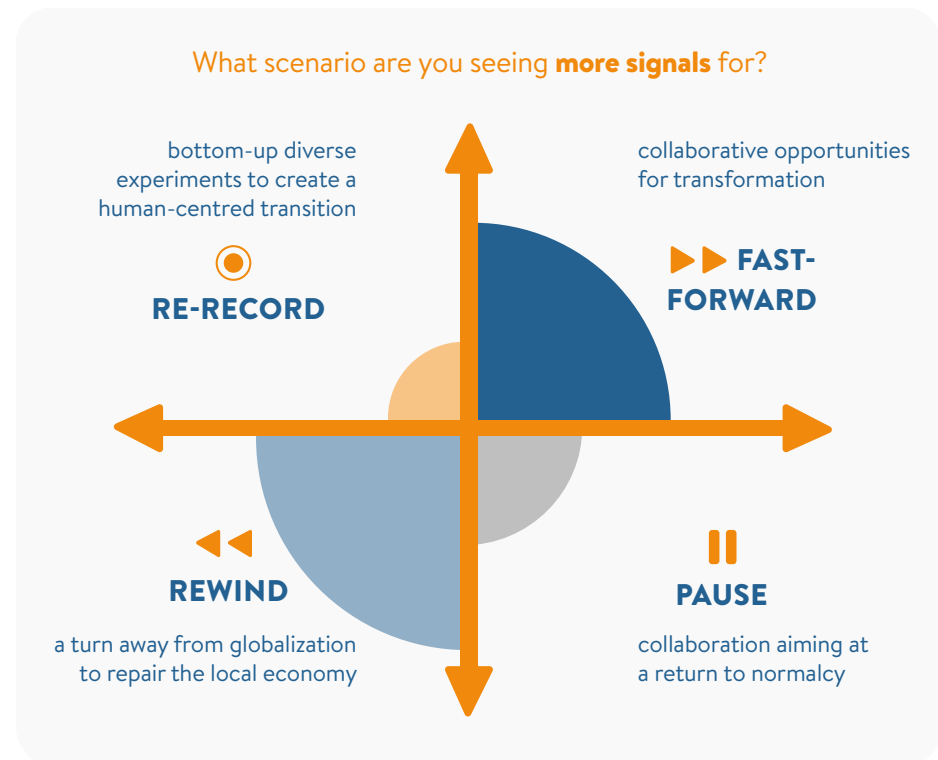
However, businesses around the world are seeing more signals for two opposite scenarios – **Rewind and Fast-Forward** – where Rewind represents an increasing focus on nationalist agendas and a return to pre-pandemic priorities, and Fast-Forward assumes global collaborative opportunities for transformational transition.

Rewind is also seen as the most challenging scenario for organisations around the world, which would indicate the need to manage increasing polarisation and fragmentation along with the rise of national states.

As the world has been reshaped by COVID, we are presented with an opportunity to facilitate massive investment in accelerating an inclusive and orderly global energy transition. The use of scenarios can prompt better quality leadership conversations on the reallocation of investments, exit strategies and policy pathfinding needed to enable orderly global energy transition as the world emerges from crisis.

Two major questions arise as organisations progress with respond, rebuild and recreate actions:

- What is our level of ambition for our contribution to global energy transition?
- How might we enable this under different scenarios?

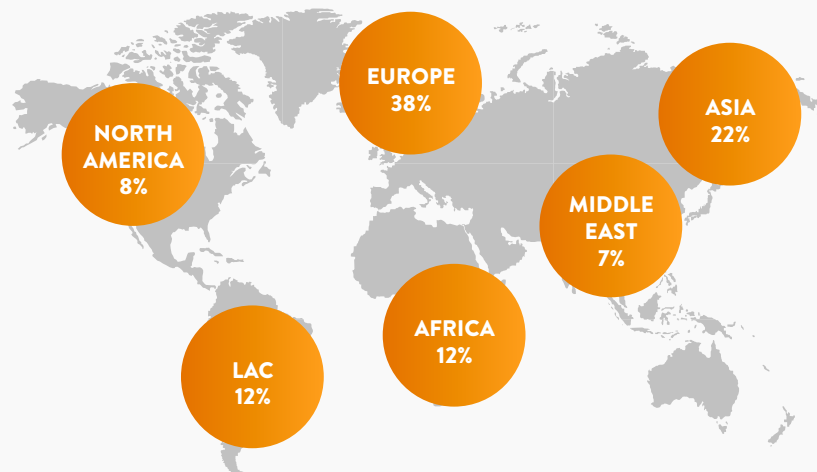


STATISTICS: Who has responded to the survey

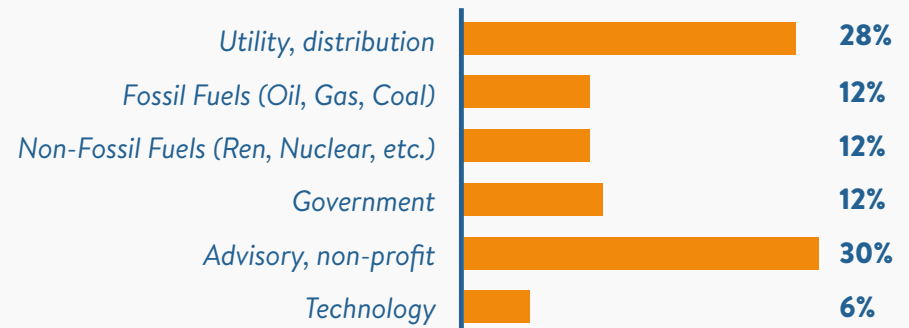
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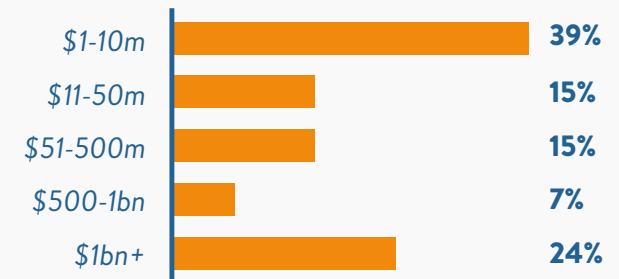
61   
COUNTRIES



Sectoral representation



Size of organisations (turnover)



Size of organisations (number of employees)



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COVID-19 INSIGHTS BRIEF

COVID-19 Global Survey Results | 2nd round | June 2020