



# Strategic Scenarios in a world driven by uncertainty

10 May 2023

ANDY HOUSTON, INGOLF DORN & GABRIELA VARGAS RESTREPO

# DISCLAIMERS AND RIGHTS

NOTHING IN THIS WEBINAR IS OR SHALL BE RELIED UPON AS A PROMISE OR REPRESENTATION OF FUTURE EVENTS OR RESULTS. AFRY HAS PREPARED THIS WEBINAR BASED ON INFORMATION AVAILABLE TO IT AT THE TIME OF ITS PREPARATION AND HAS NO DUTY TO UPDATE THIS WEBINAR.

AFRY makes no representation or warranty, expressed or implied, as to the accuracy or completeness of the information provided in this webinar or any other representation or warranty whatsoever concerning this webinar. This webinar is partly based on information that is not within AFRY's control. Statements in this webinar involving estimates are subject to change and actual amounts may differ materially from those described in this webinar depending on a variety of factors. AFRY hereby expressly disclaims any and all liability based, in whole or in part, on any inaccurate or incomplete information given to AFRY or arising out of the negligence, errors or omissions of AFRY or any of its officers, directors, employees or agents. Recipients' use of this webinar and any of the estimates contained herein shall be at Recipients' sole risk.

AFRY expressly disclaims any and all liability arising out of or relating to the use of this webinar except to the extent that a court of competent jurisdiction shall have determined by final judgment (not subject to further appeal) that any such liability is the result of the wilful misconduct or gross negligence of AFRY. AFRY also hereby disclaims any and all liability for special, economic, incidental, punitive, indirect, or consequential damages. **Under no circumstances shall AFRY have any liability relating to the use of this webinar.**

All information contained in this webinar is confidential and intended for the exclusive use of the Recipient. The Recipient may transmit the information contained in this webinar to its directors, officers, employees or professional advisors provided that such individuals are informed by the Recipient of the confidential nature of this webinar. All other use is strictly prohibited.

All rights (including copyrights) are reserved to AFRY. No part of this webinar may be reproduced in any form or by any means without prior permission in writing from AFRY. Any such permitted use or reproduction is expressly conditioned on the continued applicability of each of the terms and limitations contained in this disclaimer.



# Our presenters



**ANDY HOUSTON**  
Director  
[andy.houston@afry.com](mailto:andy.houston@afry.com)  
+44 7800 551961



**INGOLF DORN**  
Senior Principal  
[ingolf.dorn@afry.com](mailto:ingolf.dorn@afry.com)  
+44 74 6908 3809



**GABRIELA VARGAS R.**  
Senior Consultant  
[gabriela.vargasrestrepo@afry.com](mailto:gabriela.vargasrestrepo@afry.com)  
+44 7442 366214

# Agenda

- **AFRY's Strategic Scenarios**
- Methodology to create Strategic Scenarios
- Importance of Strategic Scenarios







◆ Whole households with symptoms of virus must stay indoors for two weeks  
◆ Avoid pubs, theatres, large gatherings and work from home if possible  
◆ Third of population warned to stay clear of social contact from this weekend



## FINANCIAL TIMES

Thursday September 18, 2008 | £1.50

### Global banks in crisis

Full coverage of market turbulence: NEWS Pages 2-6 COMMENT Pages 15-17  
LEX Page 20 MARKETS Pages 42-44 ONLINE [www.ft.com/crisis](http://www.ft.com/crisis)

World Business Newspaper

## Panic grips credit markets

### HBOS takeover

Government brokers £12bn deal for Lloyds TSB to buy lender

### Turmoil worsens

Volatility sparks biggest flight to safety since second world war

**The day in summary**

One-month US Treasury bill yield	Sep 17 2008
Sep 2 2008	5.25%
Sep 17 2008	5.25%

**Global markets**

Three-month Treasury bill yield	0.02%
FTSE 100	▼ -2.25%
S&P 500	▼ -4.7%

**Russia**

Its two main stock exchanges were closed to halt a market rout. Page 21

**Morgan Stanley**

Shares closed down

## Shock Hits World Markets

After U.S. Allows Investment Bank to Fail; Barclays in Talks to Buy Core Lehman Unit

### AIG Faces Cash Crisis

As Stock Dives 61%

By MATTHEW KAMINSKI, LIAM FLEVIN AND SERENA NG

**Global Markets**

DAX	▼ 504.48
One-month interest	

Source: WSJ Market Data Group



## JAPAN NUKE NIGHTMARE

- Reactors on the brink
- Radiation leak spreads
- Brits told: Quit Tokyo

# OUT OF CONTROL

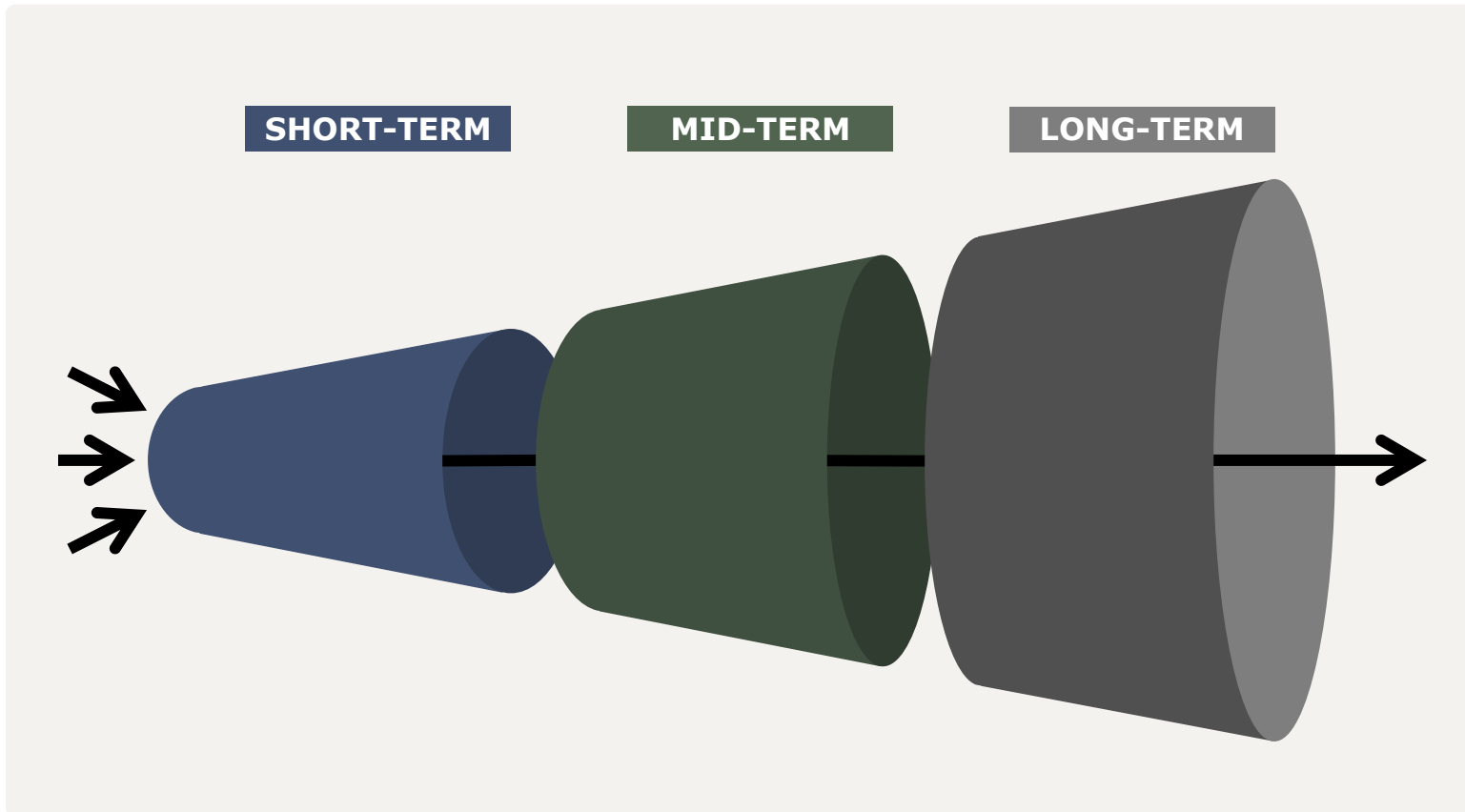
Robbo battling cancer

THROUGH IS THE GOLDEN



IMPORTANCE OF STRATEGIC SCENARIOS

Companies need to understand major trends in the long term to define their short and mid-term strategies, preparing for a range of possible outcomes



**Why should companies develop strategic thinking through scenario-driven analysis?**

By identifying the levers that **shape the environment** in which a company operates, it can devise **strategies flexible enough** to be prepared for **a wider set of future changes**.

# AFRY's four scenarios are defined as follows



### Scenario 1: **Government-led Mitigation**

Governments are the leading agents mitigating climate change, they return to international cooperation and define binding global emissions reductions targets with supporting policies that lead to achieving global net-zero by 2050



### Scenario 3: **Society-led Mitigation**

Governmental inaction leads to continued regional conflicts, economic hardship and accelerated climate change; pressure mounts and societies in the western world and liberal nations push governments and corporates to act; global net-zero only achieved by 2080



### Scenario 2: **Technology-led Mitigation**

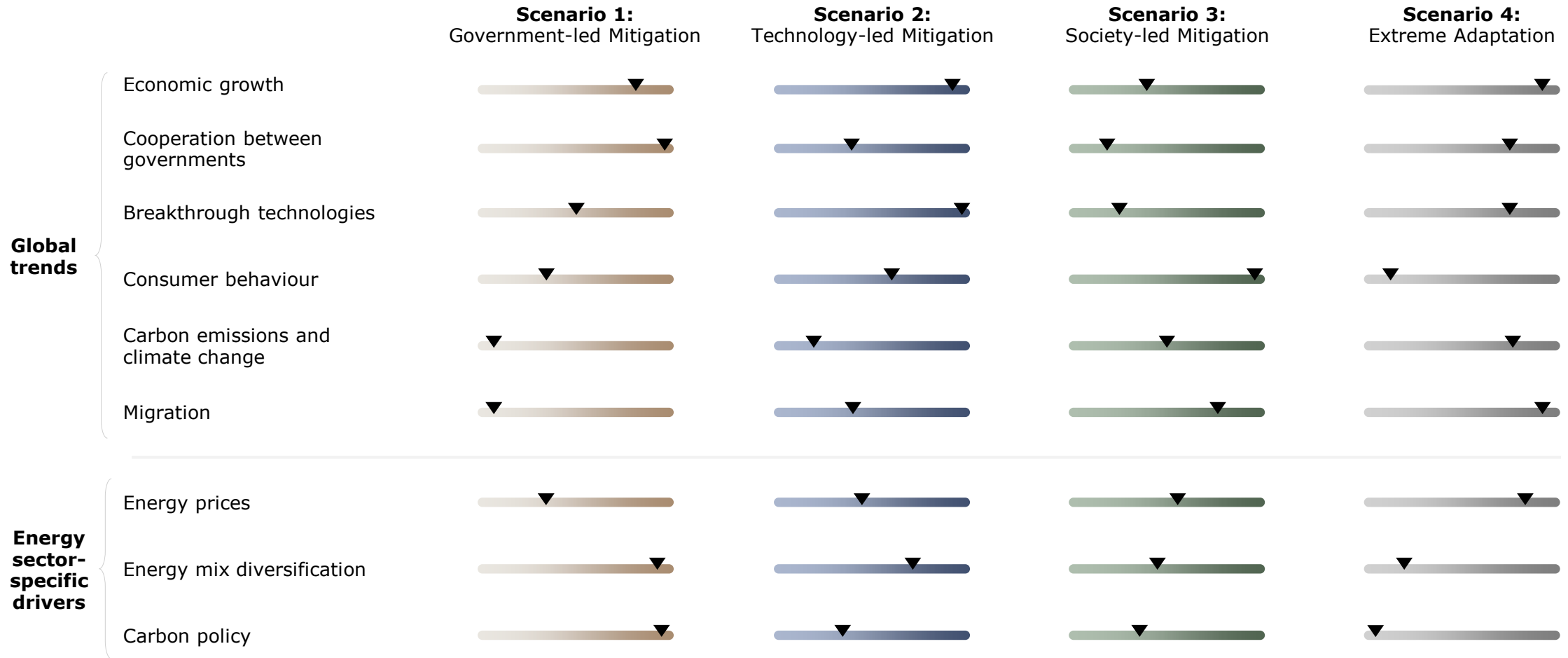
Technological innovation drives carbon emissions reductions and economic growth, governments cooperate internationally to support technology development and supply chains but fail to set global emissions reduction target; however, global net-zero is achieved by 2060



### Scenario 4: **Extreme Adaptation**

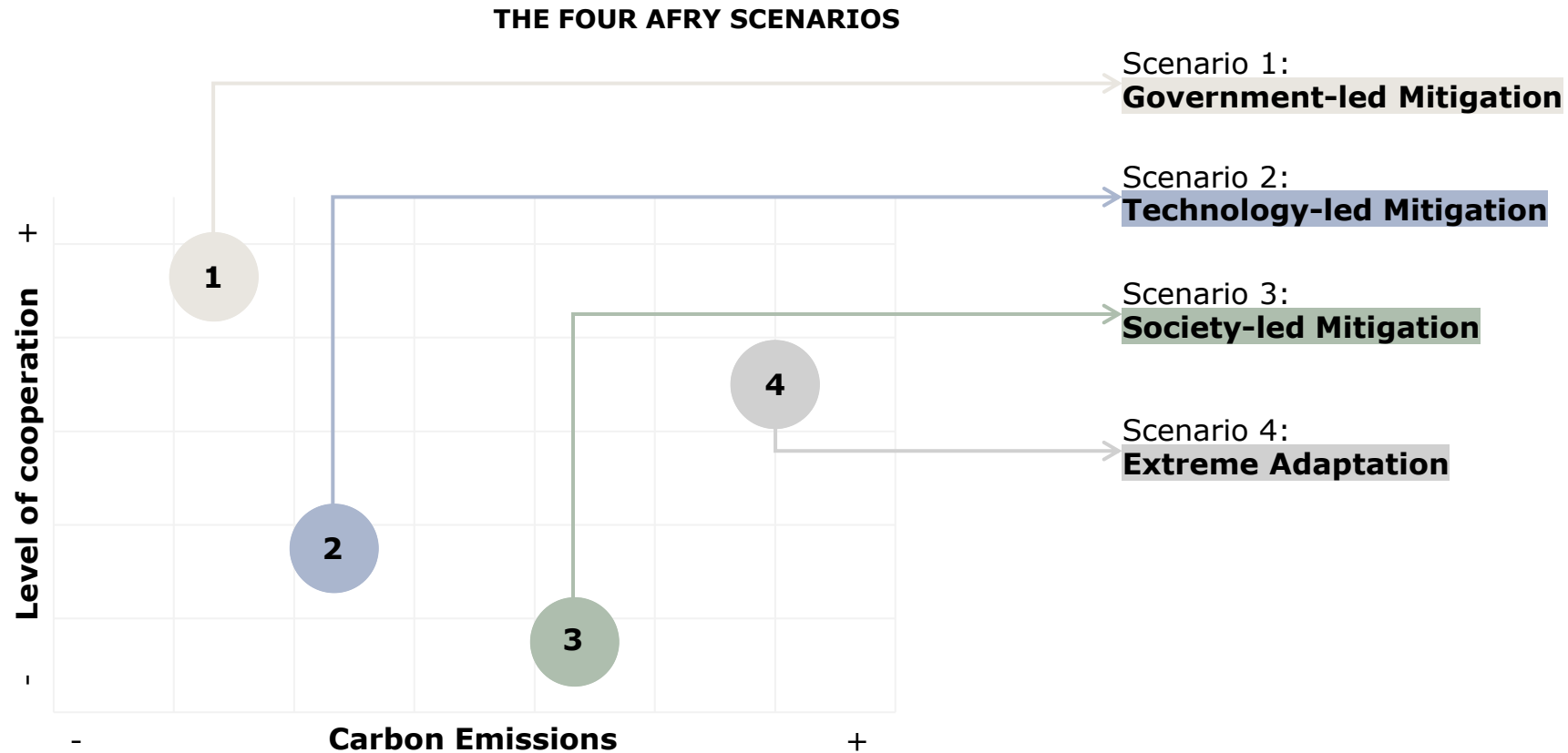
Climate change is accepted as a reality and successful adaptation becomes the objective of international cooperation between governments; economies focus on growth and continue with business as usual; new industries emerge that develop adaptation technologies; net-zero won't be achieved

# AFRY's four scenarios are defined as follows

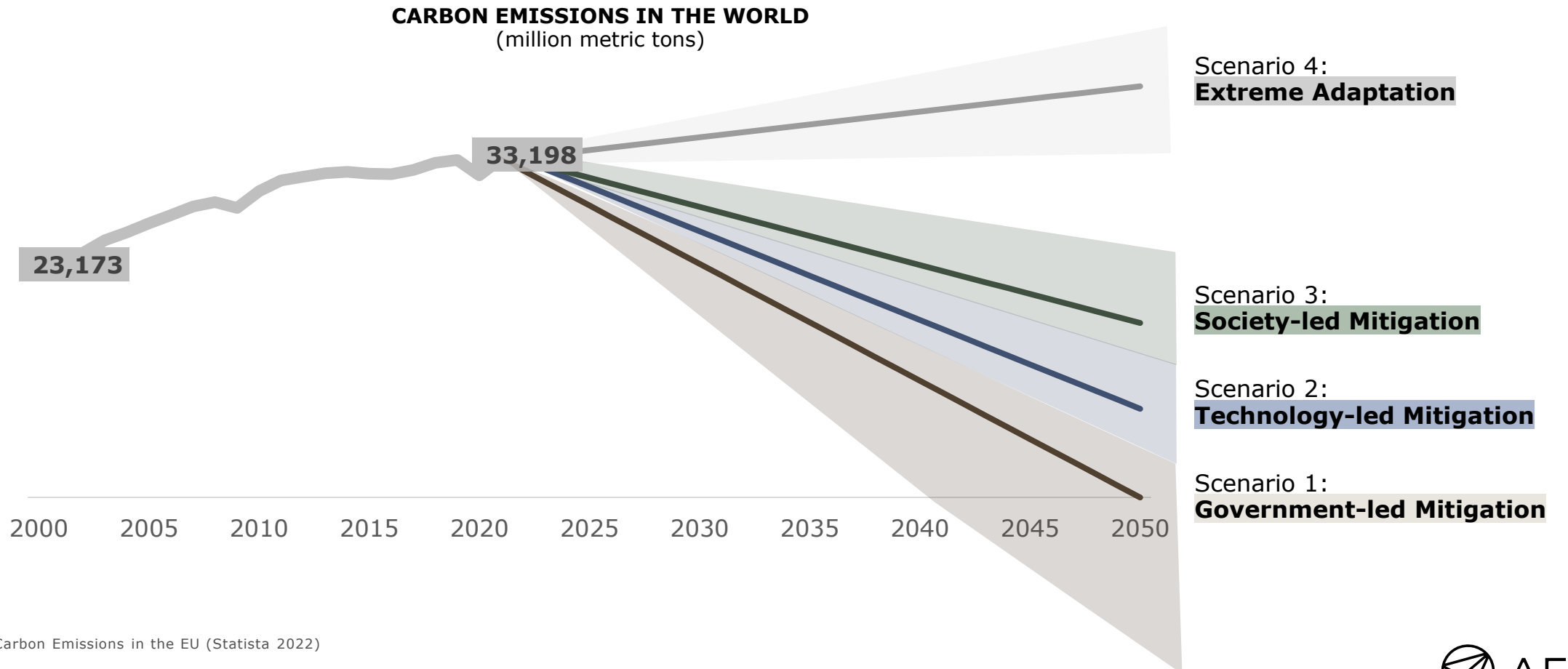




AFRY's scenarios span a broad range of possible futures and outline the different outcomes in terms of carbon emissions



AFRY's scenarios span a broad range of possible futures and outline the different outcomes in terms of carbon emissions



Source: Carbon Emissions in the EU (Statista 2022)

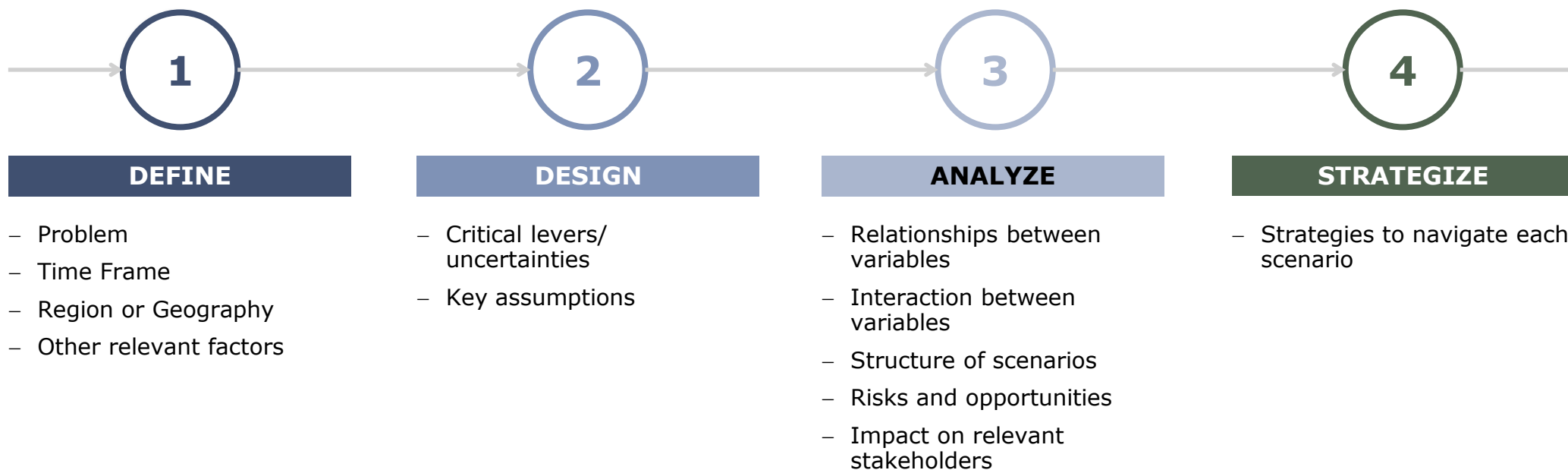


# Agenda

- AFRY's Strategic Scenarios
- **Methodology to create Strategic Scenarios**
- Importance of Strategic Scenarios




We recommend these four steps to create dependable scenarios that lead to strong short and mid-term strategies





STEP 1: DEFINE

The first step is to define the parameters of the scenarios to ensure consistency

 **PROBLEM**  
What problem will the scenarios intend to solve?



**TIME FRAME**

Will the time frame be 5, 10, 25 or 50 years?



**GEORGRAPHIC AREA**

Will scenarios focus on a city, a country, a continent or the world?



**OTHER COMPONENTS**

Are the scenarios for a specific business unit? Is it a public or private company?

STEP 2: DESIGN

And following those parameters, it is key to select the relevant uncertainties that will shape the scenarios





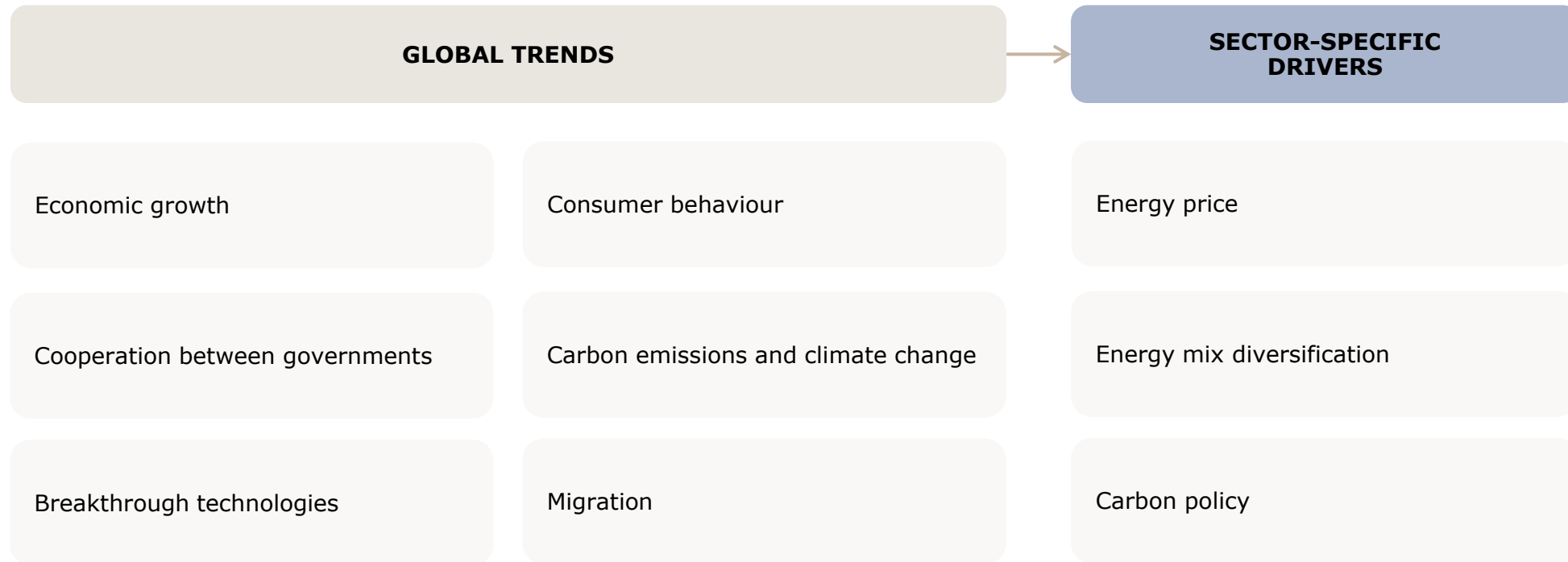
STEP 2: DESIGN

The STEEP analysis helps to map the global and sector-specific trends that will impact the future

	Social	Technological	Economical	Environmental	Political
GLOBAL TRENDS	<ul style="list-style-type: none"> <li>- Demographic changes (population growth, age distribution)</li> <li>- Labour and work</li> <li>- Migration (and urbanisation)</li> <li>- Terrorism</li> <li>- Consumer</li> </ul>	<ul style="list-style-type: none"> <li>- Accessibility to new technologies</li> <li>- Trends in R&amp;D and innovation</li> <li>- New technologies as a potential substitution</li> </ul>	<ul style="list-style-type: none"> <li>- Economic growth (GDP)</li> <li>- Stability of world economy (inflation, interest and exchange rates)</li> <li>- Globalisation</li> <li>- Supply chain shifts</li> </ul>	<ul style="list-style-type: none"> <li>- Climate change impacts</li> <li>- Scarcity of resources</li> <li>- Trends in weather and climate</li> <li>- Environmental regulation</li> </ul>	<ul style="list-style-type: none"> <li>- Stability of economic power</li> <li>- Stability of democracy</li> <li>- Globalisation</li> <li>- Ease of doing business</li> <li>- Legal and regulatory intervention</li> </ul>
SECTOR-SPECIFIC DRIVERS	<ul style="list-style-type: none"> <li>- Climate change impacts</li> </ul>	<ul style="list-style-type: none"> <li>- New "green" technologies</li> <li>- Energy mix</li> <li>- Supply chain and transportation innovation</li> </ul>	<ul style="list-style-type: none"> <li>- Energy demand</li> <li>- Energy prices</li> <li>- Supply chain shifts</li> </ul>	<ul style="list-style-type: none"> <li>- Decarbonisation</li> <li>- Renewable energy systems</li> </ul>	<ul style="list-style-type: none"> <li>- Net zero targets</li> <li>- Government energy policy and investment</li> <li>- Cross border geoengineering</li> </ul>

STEP 2: DESIGN

To be able to choose the scenario levers that will be analysed and monitored in the scenarios





STEP 3: ANALYZE

Once levers are chosen, it is key to understand the relationship and interaction between the variables

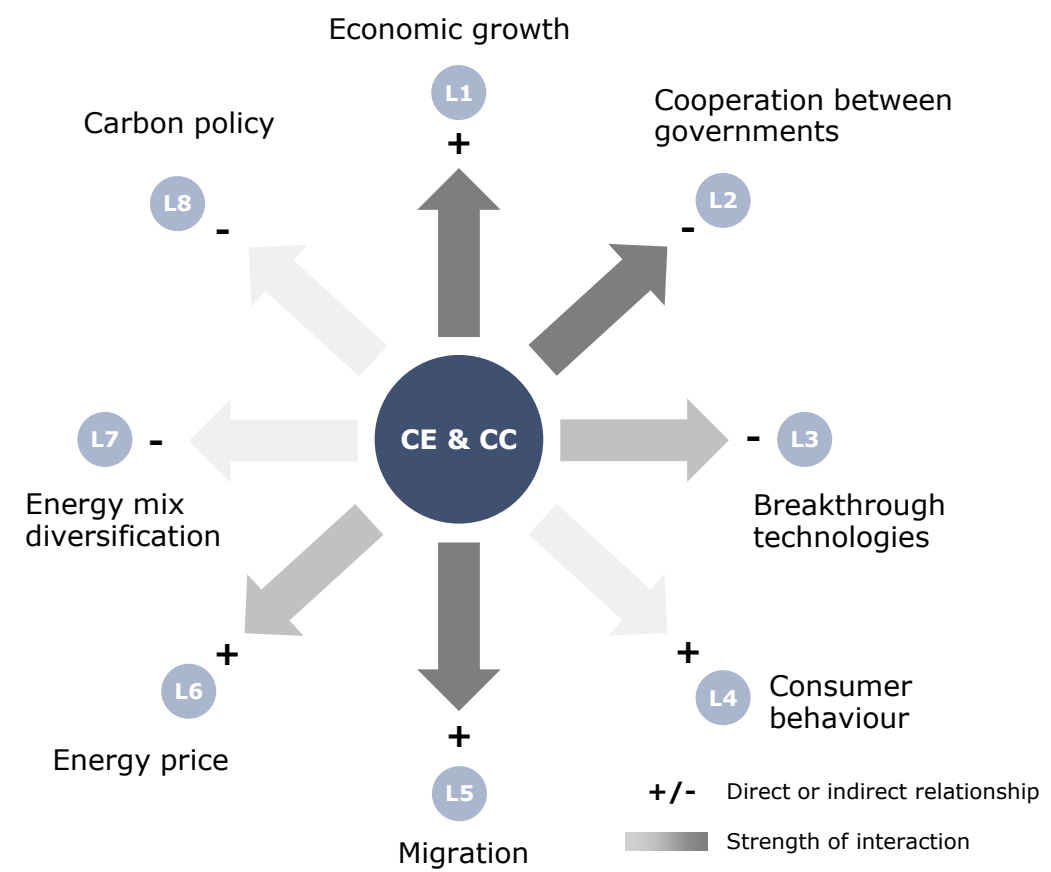
**CARBON EMISSIONS AND CLIMATE CHANGE**



The world reaches Net Zero and limits the increase temperature to 1.5°C

Carbon emissions increase. The temperature of the planet consistently rises more than 3°C

**Interactions between levers**



STEP 3: ANALYZE

# For AFRY's scenarios, this is how the levers were defined



Global Trends	<b>Economic growth</b>	Recession and low purchasing power	Economic growth and reduction in poverty
	<b>Cooperation between governments</b>	Nationalism policy	Diplomacy and no international conflicts
	<b>Breakthrough technologies</b>	Innovation stagnated, no new technological development	Boom of new, accessible technologies
	<b>Consumer behaviour</b>	Consumer patterns and trends unchanged	Increase in demand for sustainable products
	<b>Carbon emissions and climate change</b>	Net Zero and limit the increase temperature to 1.5°C	Increase in emissions and temperature of more than 3°C
	<b>Migration</b>	No mass migration	Mass migration
Sector-Specific	<b>Energy prices</b>	Decreased	Increased
	<b>Energy mix diversification</b>	Heavily dependant on fossil fuels as main energy sources	Energy transition was successful
	<b>Carbon policy</b>	No new forms of regulation regarding carbon emissions	Strong regulations mandating targets and penalties

STEP 3: ANALYZE

Once levers are chosen, it is key to understand the relationship and interaction between the variables

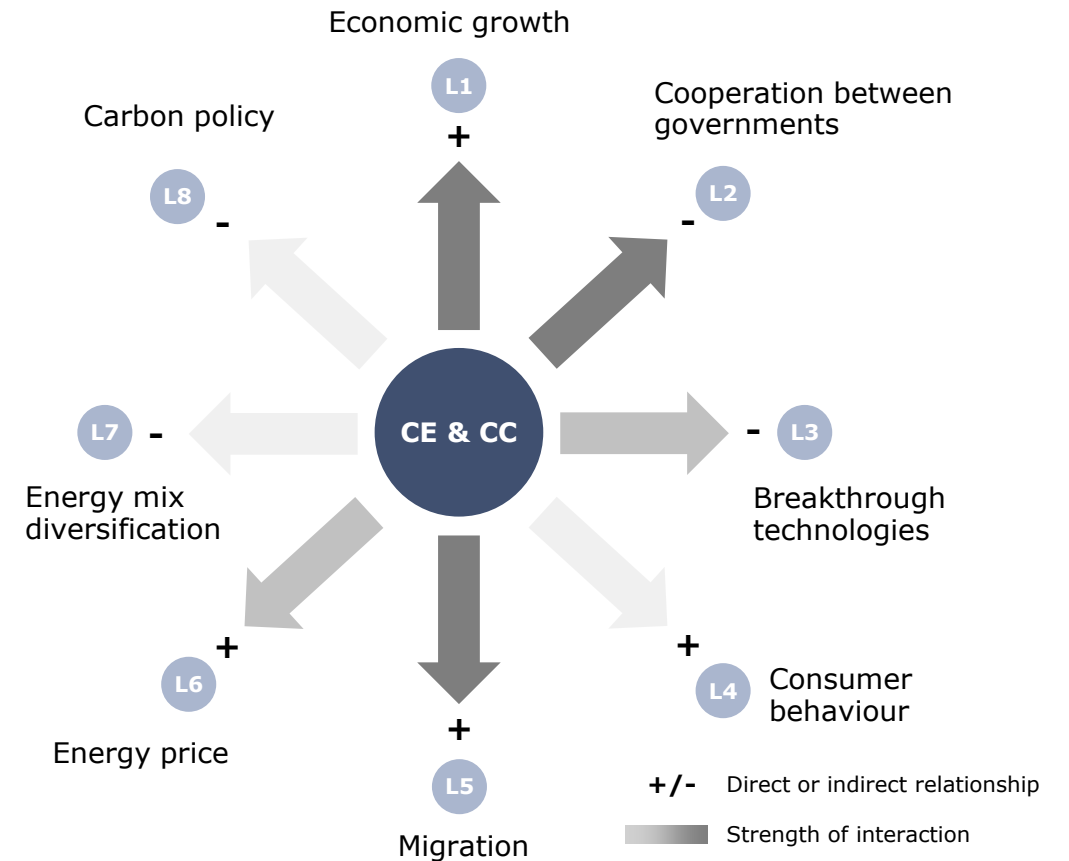
**CARBON EMISSIONS AND CLIMATE CHANGE**



The world reaches Net Zero and limits the increase temperature to 1.5°C

Carbon emissions increase. The temperature of the planet consistently rises more than 3°C

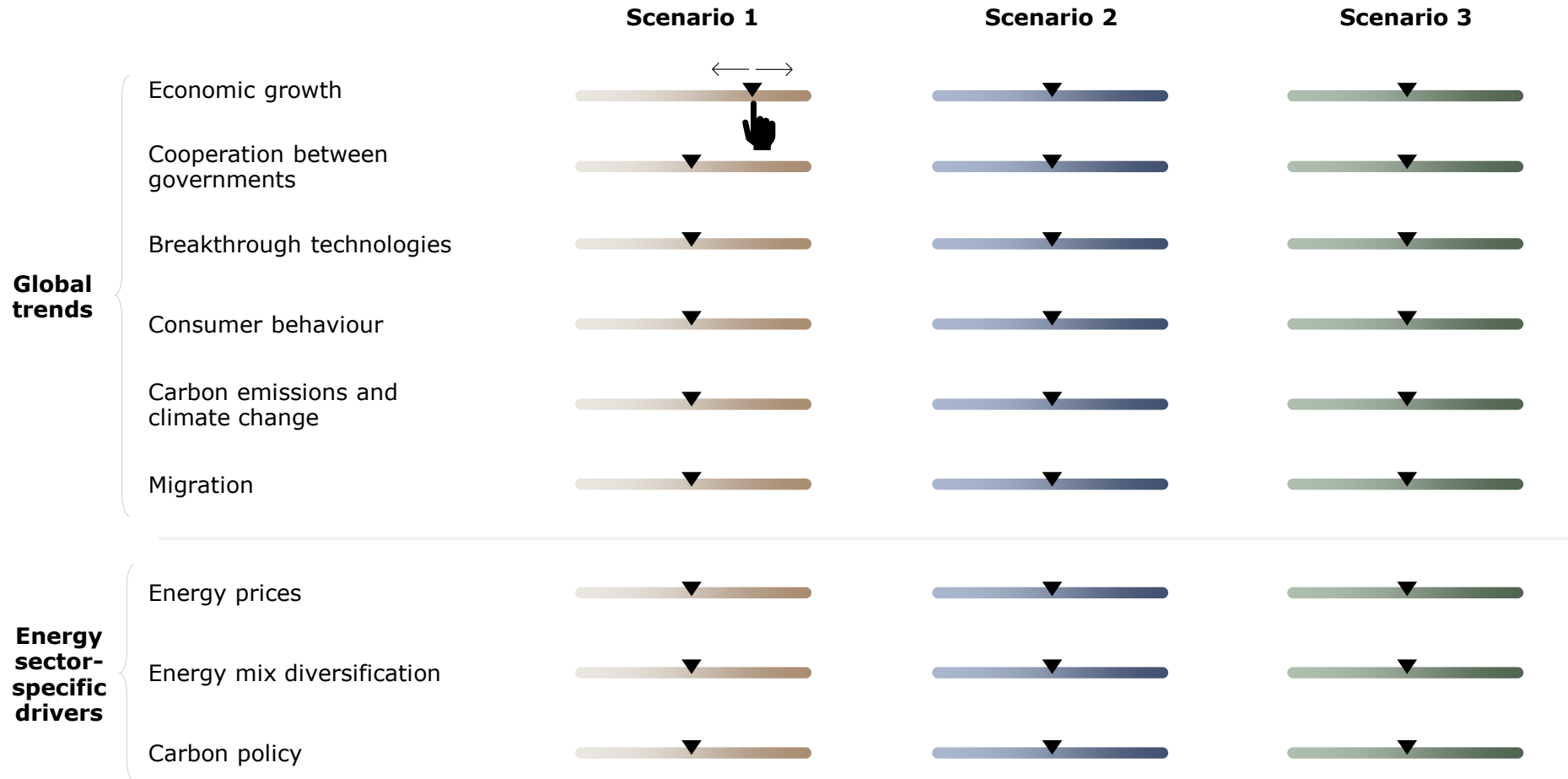
**Interactions between levers**





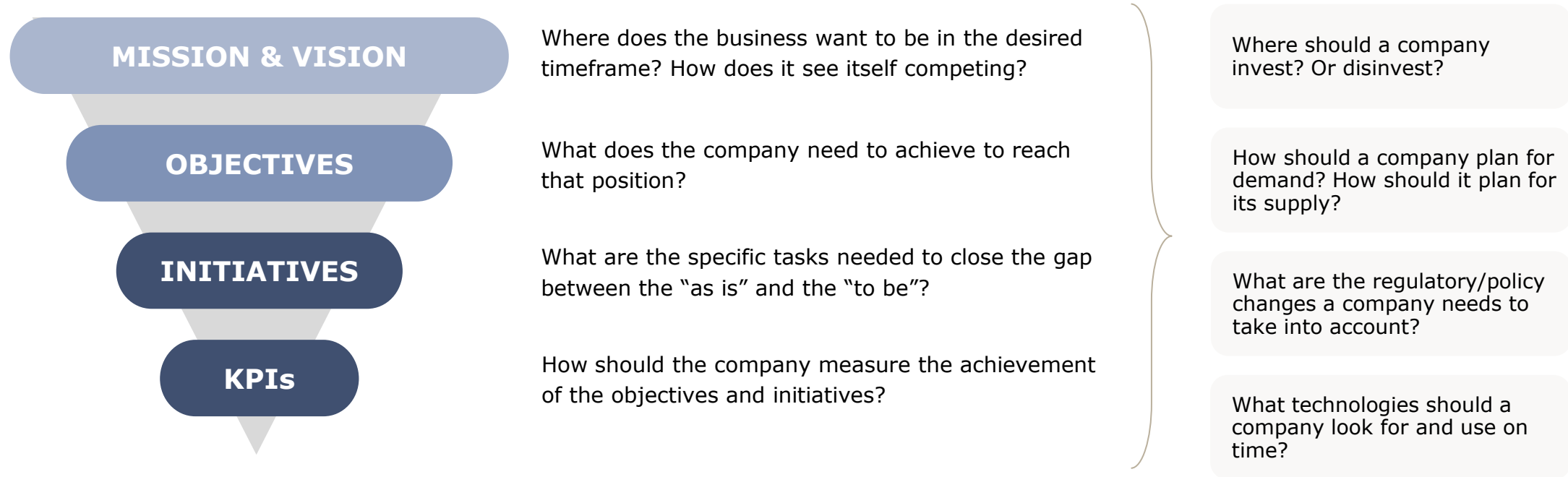
STEP 3: ANALYZE

It is needed to assess the risks and opportunities that arise from the different scenario narratives



STEP 4: STRATEGIZE

# And leveraging those risks and opportunities, organizations will be able to make strategic decisions



**ILLUSTRATIVE**

STEP 4: STRATEGIZE

A company will be more or less affected by each scenario, understanding how to be prepared for any possible outcome





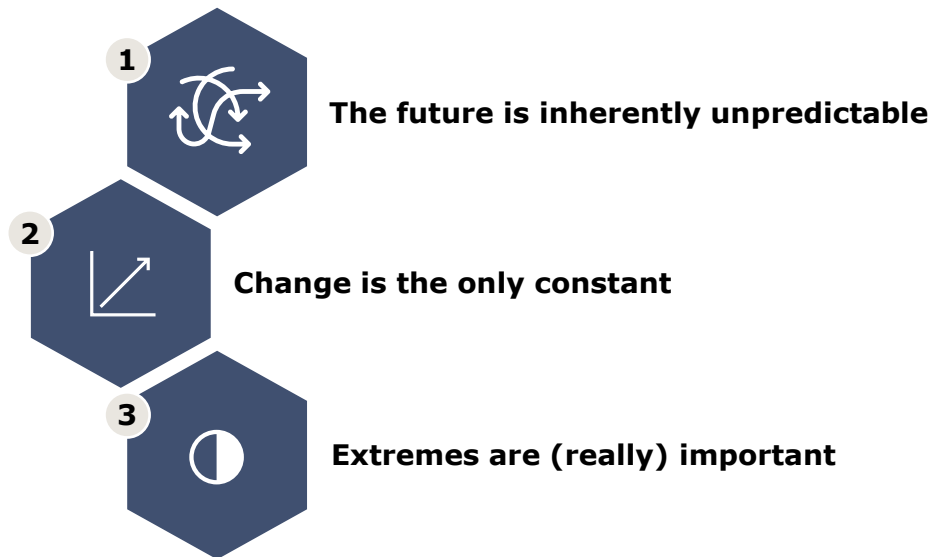
# Agenda

- AFRY's Strategic Scenarios
- Methodology to create Strategic Scenarios
- **Importance of Strategic Scenarios**



# Scenario driven analysis helps energy companies identify impactful mitigation actions to an uncertain future

## KEY TAKEAWAYS OF SCENARIO PLANNING



## IMPLICATIONS FOR COMPANIES





CONCLUDING REMARKS

## Contact us

- **Reach out** to us for more information:  
[andy.houston@afry.com](mailto:andy.houston@afry.com)  
[ingolf.dorn@afry.com](mailto:ingolf.dorn@afry.com)  
[gabriela.vargasrestrepo@afry.com](mailto:gabriela.vargasrestrepo@afry.com)
- **More webinars** will follow with relevant topics, and any update on the evolving situation.

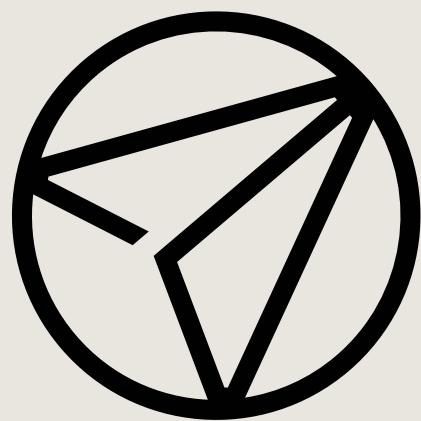
### ***Exploring the Utility Storage Battery Supply Chain***

Thursday 25 May

12pm BST / 1pm CEST

**Sign up:** [tinyurl.com/AFRYwebinar2505](https://tinyurl.com/AFRYwebinar2505)





AFRY

ÅF PÖYRY