

Interface<sup>®</sup>

## LET'S START THE CLIMATE TAKE BACK

### IF HUMANITY CHANGED THE CLIMATE BY MISTAKE...

WE CAN CHANGE IT WITH INTENT.

## WE HAVE THE POWER TO CHANGE OUR CLIMATE. AND NOW WE GET TO CHOOSE WHAT HAPPENS NEXT.

### WILL AVOIDING THE WORST BE OUR ONLY AMBITION? OR WILL WE CHOOSE TO CREATE...

#### Life thrives in a benign climate.

We can all live, love, make, grow and progress within a stable global climate system.

Turns out our species has the power to change our whole planet.

That came as a bit of a surprise. But it's time to get over it and get on with it. We've got the tools, we've got the ingenuity and we've got every living thing needing a climate fit for life.

This is our awesome opportunity.

## MOST OF US WOULD CHOOSE A CLIMATE FIT FOR LIFE. SO WHAT'S HOLDING US BACK FROM TAKING CONTROL OF CLIMATE CHANGE?

# PLANET

## PEOPLE

## XTINCTION CARBON EXTREME WEATHER

## OUR TWIN PROBLEMS

We face two challenges to taking back our climate. One in our atmosphere and one in our heads. Today we have apathetic, confused and afraid people living in a carbon saturated system.<sup>\*</sup> With the only solution offered; painful sacrifice to avoid the worst effects. DENIAL

\* In a global survey conducted by Pew Research Center in 2015, publics in 19 out of the 40 nations surveyed cited climate change as their biggest worry, making it the most widespread concern of any issue included in the survey.

According to the Scripps Institution of Oceanography the concentration of carbon dioxide in our atmosphere has risen past 410 parts per million as of May 2017.

## WHERE SHOULD WE START IN RESOLVING THESE TWIN PROBLEMS?

## CHANGE STARTS IN THE MIND

We believe that how we think and talk about climate change can change everything.\*

Positivity, optimism and belief in our ability to solve climate change is a pre-requiste to actually doing so.

\* In 2006, research group ESRC reviewed 129 different studies of how people change their behaviour for the better and found that the least effective behavioural motivator was fear or regret.

SITIVITY

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## AT INTERFACE, WE'VE ALREADY LEARNED THE POWER OF AMBITIOUS AND POSITIVE MINDSETS.

## "What's the business case for ending life on earth?"

**RAY ANDERSON, FOUNDER OF INTERFACE** 

#### MISSION ZERO (1994 - 2020)

We believe this is possible because we've already experienced the power of a changed attitude. Our Mission 2020 target was to have no negative impact on the earth. Many in the business community thought this was impossible.

But over 5,000 people at Interface have worked for decades to show that a business can be positive for the planet.

And we discovered that our mindset can drive more than just our own action, it can also inspire others.

# **OUR NEW MISSION**

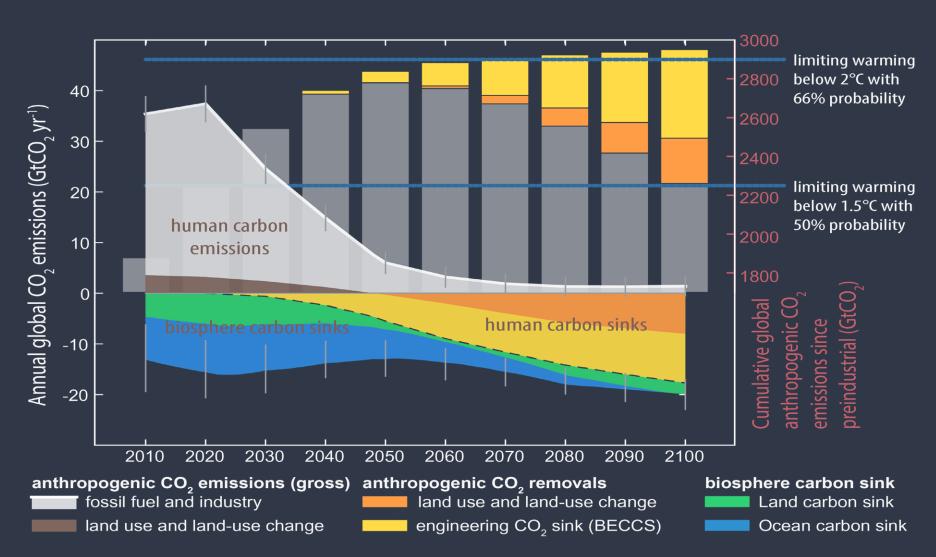
#### CLIMATE TAKE BACK (2016 - UNTIL IT'S DONE)

At Interface, we're convinced a fundamental change needs to happen in our global response to climate change. We need to stop thinking about how to merely limit the damage caused by climate change – and start thinking about how to create a climate fit for life

## THIS VISION OF A CLIMATE FIT FOR LIFE IS TAKEN DIRECTLY FROM SCIENCE.

## THE SCIENCE OF A CLIMATE FIT FOR LIFE

In early 2017 Professor Johan Rockström from the Stockholm Resilience Centre proposed a scientific model of how to reach safe climate limits.



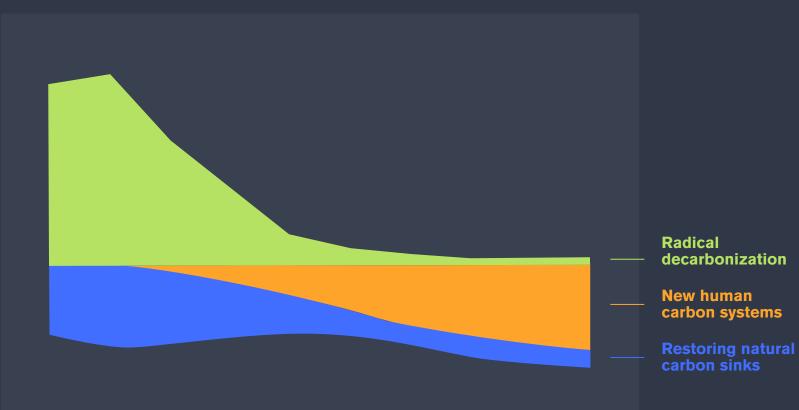
#### **DON'T PANIC!** This looks complex, but it's actually a plan of action.

stockholmresilience.org

## BREAKING IT DOWN

Limiting global warming to 1.5 degrees within the next century will require an enormous amount of action, innovation and disruption across four major areas.

While we radically decarbonize our current systems, we'll also need to restore and protect natural carbon sinks, and scale up our own carbon drawdown technologies to support the biosphere. Finally, we'll need to develop a business system that allows all of this to happen.



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## THE CLIMATE TAKE BACK PLAN



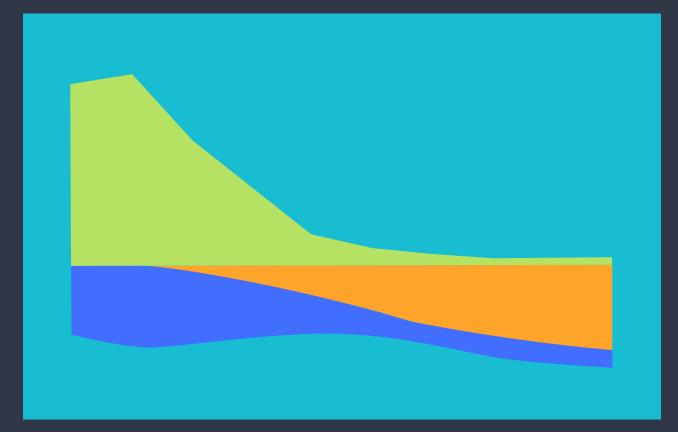
We've turned the science into a plan to take back our climate.

## HOW TO TAKE BACK THE CLIMATE

Science tells us we need three elements for a climate fit for life, which can be translated into principles.

We've also added a fourth: Industrial Re-Revolution. Because all the other three changes will need new business systems to make them work.





#### **LEAD** THE INDUSTRIAL RE-REVOLUTION





## THE CLIMATE TAKE BACK

#### 

Aim for zero negative impact on the environment

#### **LEAD** THE INDUSTRIAL RE-REVOLUTION

Transform industry into a force for the future we want



#### LOVE CARBON

Stop seeing carbon as the enemy, and start using it as a resource

#### LET NATURE COOL

Support our biosphere's ability to regulate the climate

## HOW WILL THE CLIMATE TAKE BACK WORK IN PRACTICE?

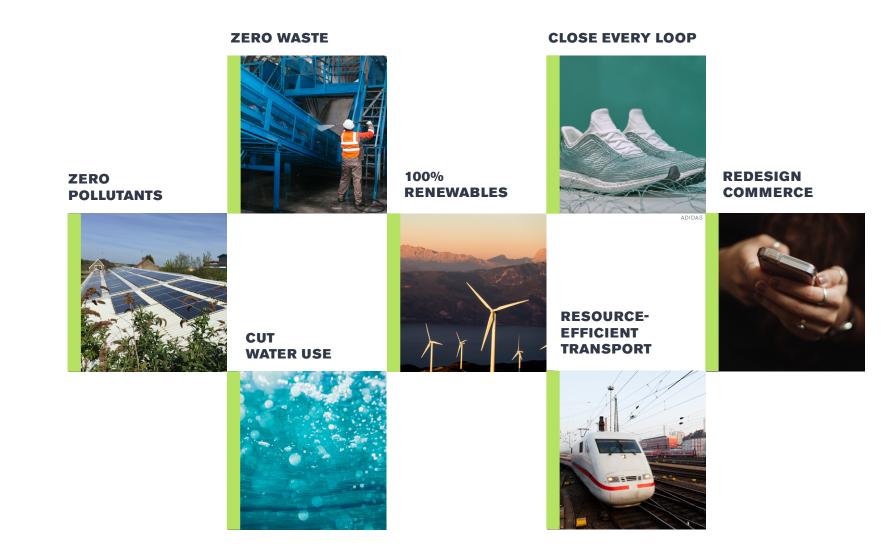
## LIVE ZERO

Aim for zero negative impact on the environment



## WHAT IS LIVE ZERO

Aim for zero negative impact on the environment

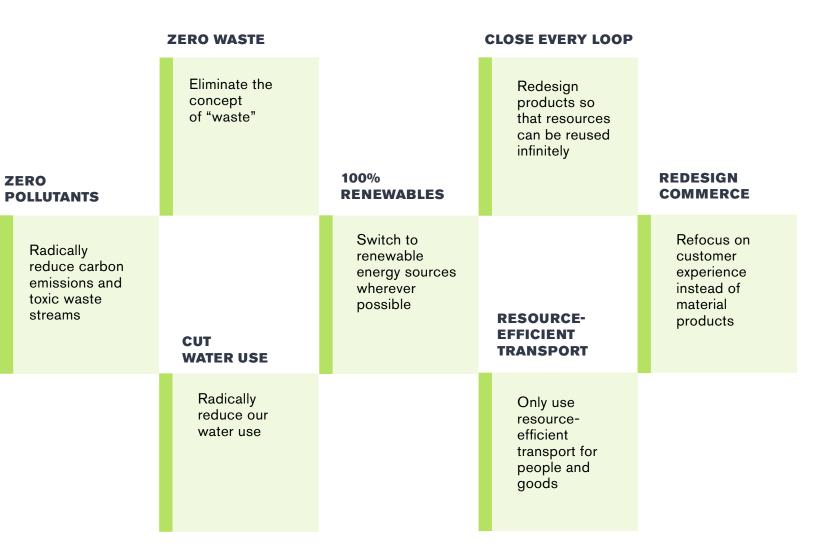


#### **CLIMATE TAKE BACK**



## HOW TO LIVE ZERO

Most companies already aim to cut their carbon footprint – but we need to aim higher. Our shared goal must be for zero negative impact on the environment by eliminating waste, switching to renewables, and drastically reducing carbon emissions.





#### YAKUSHIMA, Japan

Living on 100% renewable electricity in one of the world's most beautiful locations

One of the world's most successful examples of a shift to renewable generation is the island of Yakushima. 100% fuelled by renewable sources.

The islands annual energy demands of its 13,000 inhabitants are met by three hydroelectric power plants.

It already produces more electricity than it can consume and has a longterm goal to become carbon-free.

Provides a test bed for Nissan and Mitsubishi to develop vehicles completely powered by renewables.

## Interface®

Eliminate any negative impact its business creates

Mission Zero is Interface's outstanding ambition to achieve zero negative impact on the environment by 2020.

Interface achieved a 98% reduction in carbon emissions, with 95% of energy coming from renewable resources to date. They cut water use by 93% and now send zero waste to landfill.

With 100% of raw materials for product development that are bio-based or recycled, Interface products have the lowest carbon footprint in the market.

## Heathrow

Bold leadership towards a sustainable aviation future

Heathrow aspires to become a zerocarbon airport, taking it from creating a negative to a net positive impact.

The airport will develop a 'Centre of Excellence' to solve some of the industry's greatest challenges including creating a sustainable aviation fuel.

As of 2017, Heathrow will be powered by 100% renewable electricity, and plans to use its leadership position of carbon neutral expansion by 2020 to 'accelerate the era of sustainable flight'.

## LOVE CARBON

Stop seeing carbon as the enemy, and start using it as a resource



## WHAT IS LOVE CARBON

Stop seeing carbon as the enemy, and start using it as a resource REUTILIZATION



CARBON CAPTURE



USABLE DURABLE CARBON



## HOW TO LOVE CARBON

Carbon is a building block for life, and that means it can be a building block for us. What if we took captured atmospheric carbon and used it to create the things we use every day – plastics, concrete, fuel, and even products like shoes and carpet tiles?

**USABLE** DURABLE CARBON Locking captured carbon into stable solids. such as plastics, and using the raw material to create CARBON products for use CAPTURE Capturing carbon directly from source at industrial sites, or sequestering fugitive carbon from the atmosphere using technology that mimics photosynthesis

#### REUTILIZATION

Preventing all forms of working durable carbon from becoming fugitive carbon again through reuse and recycling



## WHO LOVES CARBON



Turning today's waste into the building blocks of tomorrow

Carbon8 have developed revolutionary process that combines atmospheric  $CO_2$  and thermal waste to create the concrete blocks for the buildings of tomorrow.

The aggregate is a genuinely carbon negative material with the amount of  $CO_2$  captured exceeding that used in production.

Every tonne of blocks generated captures and stores as much  $CO_2$  as four trees do in a year.

Carbon8's latest plant at Avonmouth can capture as much  $CO_2$  annually as 200,000 trees.

### 

Removing carbon from our atmosphere by replacing oil with air

AirCarbon plastic is made from carbon in the air, locking in carbon that would otherwise have remained in our atmosphere.

This breakthrough technology inspired by the natural carboncapturing processes of plants and microorganisms.

10 years of research led to the world's first patented commercial carbon technology and product, the AirCarbon chair.

The material is able to meet the performance requirements of a wide range of applications.



Creating carbonates from air and flue gas to lock CO, into products

New Sky's pioneering CarbonCycle process creates carbon negative raw materials, with chemical by-products that are useful but not harmful.

 $CO_2$  is captured from the atmosphere, or from flue gas before it enters the atmosphere and turned into carbonates (safe, mineralized forms of  $CO_2$ ) that are identical to conventional "fossilised' counterparts.

The carbonates (and chemical byproducts) are versatile and have a wide range of applications in manufacturing, food production and water purification.

## LET NATURE COOL

Support our biosphere's ability to regulate the climate



## **WHAT IS LET NATURE** COOL

Support our biosphere's ability to regulate the climate

**AFFORESTATION** AND REFORESTATION



**ENHANCED** WEATHERING





SOIL

MANAGEMENT

RESTORATION



WETLAND



## HOW TO LET NATURE COOL

Nature has the power to regulate the climate – but only if humanity doesn't get in the way. Right now, the excess carbon we're emitting is interfering with this regulation system. We need to restore the Earth's core ecosystems and make space for life itself to stabilise our climate.

	AND		FFORESTATION ND EFORESTATION			BLUE CARBON HABITAT RESTORATION	
-	OIL ANAGEMENT		Greening our urban spaces, our farmland, and replanting the forests we've lost		ENHANCED WEATHERING		Restoring our salt marshes, mangroves and sea grasses
	Ensuring our soil has all the nutrients it needs to manage carbon effectively		WETLAND RESTORATION		Using minerals that sequester carbon as they "weather"		
			Replanting and protecting wetland habitats				



## WHO LETS NATURE COOL



Turning sea urchins into food and keeping kelp forests flourishing

Urchinomics harvests and cultivates sea urchins as a gastronomic treat, protecting our 'ocean rainforests'.

Overfishing has allowed urchin populations to increase. Their grazing destroys kelp forests, an important carbon sink.

The Urchinomics harvesting process increases the yield of food-quality urchins from 15% to 90%, and locks in around 60m tonnes of  $CO_{2}$ .



Scaling up reforestation by using drones to plant a billion trees

Founded by an ex NASA employee, BioCarbon Engineering's goal is to plant one billion trees using airborne drone technology.

Drones are deployed to disperse biodegradable seed pods carrying germinated seeds.

Just one drone can carry 300 seed pods, and can plant 100 hectares in a 36 hour period.



A global challenge to create buildings that give more than they take

The Living Building Challenge is a building certification scheme that has got people around the world constructing buildings that have a positive impact on the human and natural systems that interact with them.

The standard ensures buildings are self-sufficient, healthy for occupants and remain within the resource limits of their site.

Hundreds of projects are already certified or on their way to certification.

## LEAD THE INDUSTRIAL RE-REVOLUTION

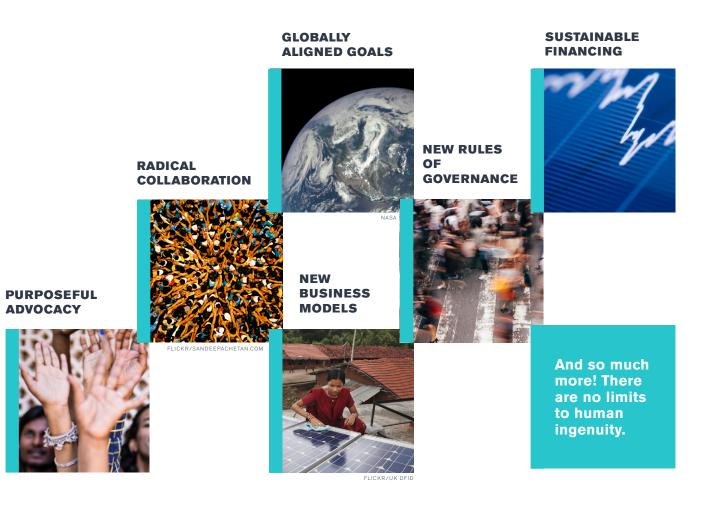
Transform industry into a force for the future we want

Interface



### WHAT IS LEAD THE INDUSTRIAL RE-REVOLUTION

Transform industry into a force for the future we want

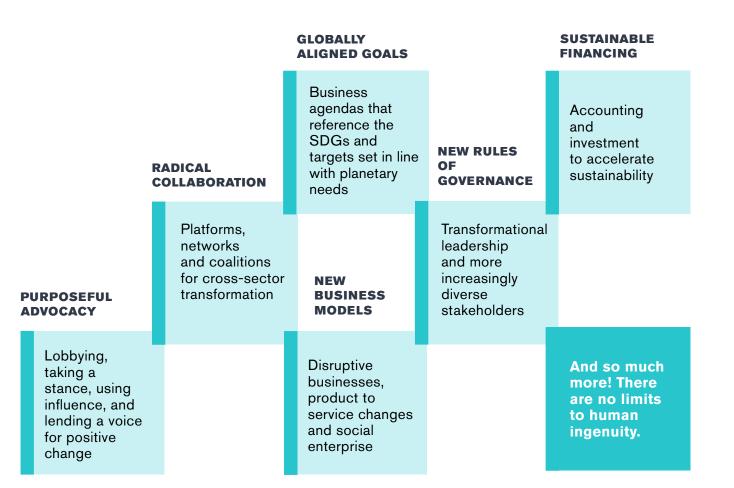


**CLIMATE TAKE BACK** 



### HOW TO LEAD THE INDUSTRIAL RE-REVOLUTION

There's no doubt that industry has been a force for human progress. But the unintended environmental consequences of industrialization have been severe. We didn't know what we were doing then, but we do now. What we need are new models of low-carbon, inclusive and collaborative business that deliver value for everyone. Starting with, but not limited to:





### WHO LEADS THE INDUSTRIAL RE-REVOLUTION



Architects <u>Advocate</u> Action on Climate Change

Advocating for a healthy, liveable and sustainable built environment

Architects Advocate is a network of architectural practitioners who have publicly acknowledged their duty to drive climate action.

The nonpartisan network calls for meaningful legislation and policy on climate change, in order to protect healthy and livable communities and cities.

Over 1000 architects have committed to "speak up and speak out", recognizing climate change as the biggest challenge and the greatest opportunity facing their profession.

## KERING

An accounting tool that makes reducing impact drive performance

Kering's pioneering Environmental Profit & Loss tool allows brands to effectively measure environmental impact in monetary terms.

Kering are able to account for the production and processing of 200+ raw materials in more than 120 countries through the EP&L

EP&L methodology is opensourced to drive sustainable supply chains across all product manufacturing industries.



A universal approach for business to transition to a low-carbon economy

Science-based targets show how much a company needs to reduce its greenhouse gas emissions to keep us below two degrees of warming, compared to preindustrial levels.

The Science Based Targets initiative offers companies guidance, tools, and technical assistance for setting sciencebased targets.

Science-based targets are ushering in a new era for sustainability in business, with 260 companies signed up to setting targets in this way.

## THERE ARE SO MANY EMERGING EXAMPLES OF POSITIVE CHANGE. BUT IS INTERFACE ALONE IN BELIEVING WE CAN REALLY TAKE BACK THE WHOLE CLIMATE?

## TO ANSWER THIS QUESTION, INTERFACE INVITED CLIMATE EXPERTS FOR THEIR RESPONSE TO THIS IDEA

This included change-makers and thought leaders, from a range of sectors and from across the world. 404 responded.

Following that survey, we then partnered with Net Impact to survey the next generation of business leaders (aged between 18 and 35 year old). Over 300 responded.

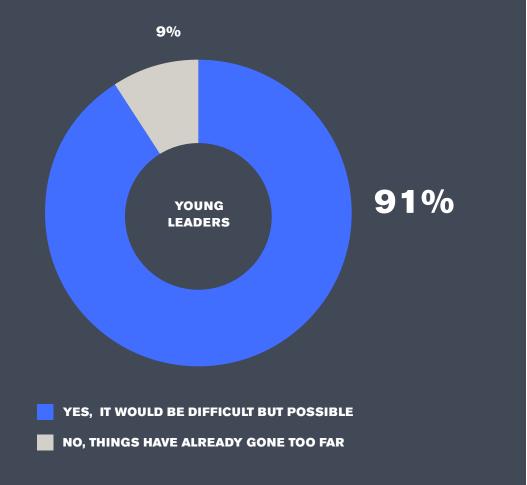
These are just some of our findings... Find the full survey insights report on our website, and discover what climate experts and young business leaders really think is going on in climate change today.

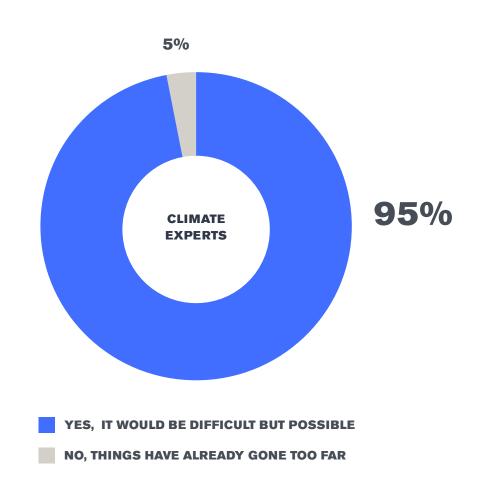
READ THE

WE ASKED Do you believe we can take back our climate, and, make a climate fit for life? **5**% **95% CLIMATE EXPERTS** 

YES, IT WOULD BE DIFFICULT BUT POSSIBLE NO, THINGS HAVE ALREADY GONE TOO FAR

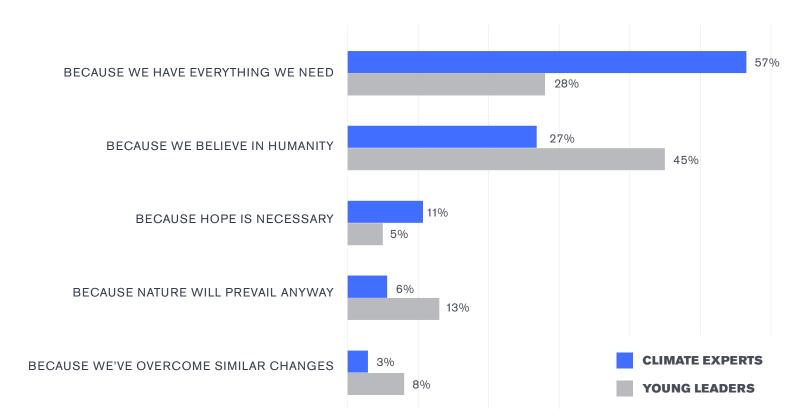
## The next generation of business leaders was less optimistic.





## WE ASKED Why do you believe it's possible?

For the climate experts, the most compelling reason to believe is that we already have everything we need. While the young leaders agreed with the power of this argument, they are more inspired by their belief in humanity.

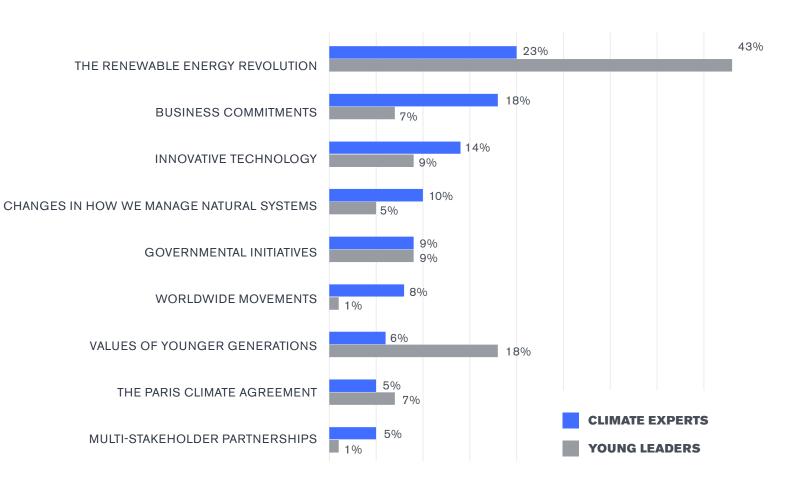


Please note that we asked climate expert respondents to give free text responses to our questions. Many of their responses covered more than one of the themes in this report – so the percentages in this graph do not add up to 100.

## WE ASKED What is the best example of Climate Take Back already happening?

When we asked our climate experts for examples of Climate Take Back, we received over 250 suggestions.

The young business leaders responded to these, with huge optimism for renewables and a confidence in their own generation.



Please note that we asked climate expert respondents to give free text responses to our questions. Many of their responses covered more than one of the themes in this report – so the percentages in this graph do not add up to 100.

## WE ASKED CLIMATE EXPERTS What would make Climate Take Back impossible?

Climate experts believed there was one factor above all holding back progress on climate change.

The phrase 'business as usual' was often repeated. And issues of vested interests, short termism and political ennui have been included within this category.



## said it was 'business as usual' holding us back.

Fixations and short term gains over long-term prosperity.

Policy markets caught by the tragedy of the horizons.

When companies talk about the need to tackle the climate issue, yet still focus on selling more stuff to generate more profits and create more waste, without seeing the need to change to more sustainable business models.

Complacency and continuation of the business as usual lifestyle.

Lack of transformation of the policy, market and social systems that pattern and drive current modes of economic production. WE ASKED CLIMATE EXPERTS What would make Climate Take Back impossible?

One additional fascinating barrier emerged from the experts.

This mindset challenge was raised by experts across sectors and geographies.



said we will never take back the climate unless we believe we can. Where there is a will there is a way.

<sup>11</sup> Not believing it is possible.

Disengagement of people to take actions and believing they can't make a difference.

Not doing anything. Focusing on the negatives.

Gloom porn. Focusing on how awful life could be, on how bad we are.

Not being able to imagine a positive future. People not being inspired to make changes. Several climate experts added spontaneous responses to the question, identifying the need for

## A new story.

Inspire people by showing them that it's already happening.

<sup>44</sup> Build a narrative about climate take back. Climate change is seen as a disaster to avoid. You are trying to reframe it as a positive opportunity.

Take the message to 'non believers'.

## IF WE NEED A NEW STORY FOR OUR CLIMATE FUTURE, WE NEED YOU.

### GET INVOLVED, AND GET ACTIVE.

- Join the planning and share your examples of Climate Take Back in our LinkedIn Group
- Read the full Insights Report from our survey
- Visit our website here

#### AND ABOVE ALL...

# **STEAL THESE SLIDES!**

If we are going to change minds, and increase ambitions then we all need to tell a different story. So please help make the climate take back a reality.

These slides are open-source. Please take, reuse and adapt them to help others chose a climate fit for life