



# BEYOND NET ZERO

THE HUMAN ADAPTATION ECONOMY

Creating the Products and Services that Help Society Thrive in a 1.5°C World

# THE JOURNEY TWENTY YEARS OF PROGRESS

FROM CARBON TO ADAPTATION VALUE

2007  
PAS 2050

2010s  
PRODUCT CARBON  
FOOTPRINTS

2020s  
NET ZERO

TODAY  
BEYOND NET ZERO

TOMORROW  
THE HUMAN  
ADAPTATION  
ECONOMY



We set the standard  
for measurement

We measured  
our impact

We set targets  
to reduce emissions

We recognise adaptation  
as our next responsibility

We create solutions that  
help society thrive in a  
**1.5°C** world

“ Twenty years ago we measured carbon.  
**Tomorrow we measure adaptation value.** ”

# THE CLIMATE REALITY

Key Facts. Current Status.



## 2024

HOTTEST YEAR  
EVER RECORDED



## 10

THE LAST TEN YEARS  
ARE THE HOTTEST  
ON RECORD



## 5x

INCREASE IN  
WEATHER-RELATED  
DISASTERS SINCE  
THE 1970s



## US\$300bn+

ANNUAL ECONOMIC LOSSES  
FROM CLIMATE DISASTERS



## 425 ppm

ATMOSPHERIC CO<sub>2</sub>  
CONCENTRATION



## 1.5°C

WE ARE DANGEROUSLY  
CLOSE TO BREACHING  
THE 1.5°C LIMIT



EXTREME HEAT



WILDFIRES



FLOODING



DROUGHT



STRONGER STORMS



CLIMATE CHANGE IS NO LONGER A FUTURE RISK.  
IT IS A PRESENT OPERATING CONDITION.





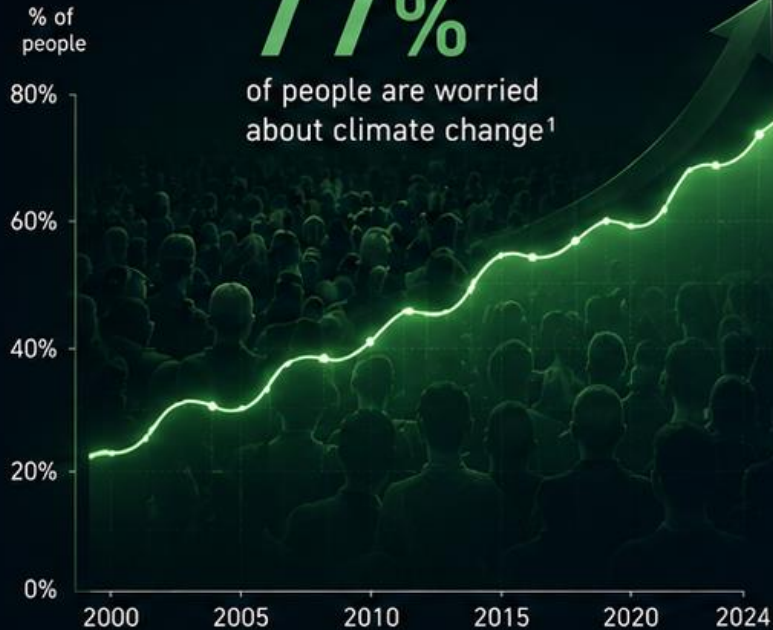
# THE NET ZERO PARADOX

High concern. Low consensus. The belief gap driving resistance.

## CLIMATE CONCERN RISING

**77%**

of people are worried  
about climate change<sup>1</sup>



Concern for climate change  
continues to reach  
**record highs**

## WHY THE GAP EXISTS:

The Belief-Conditioned Change Model (BCCM)<sup>2</sup>



“ People do not reject evidence.  
They interpret it through belief. ”

## POLITICAL SUPPORT FRAGMENTING

**45%**

of people say their government  
is doing enough on climate change<sup>3</sup>



Trust and acceptance are  
fragmenting across  
**societies**



## THE IMPLICATION

Bridging the belief gap requires more than better messaging.  
It requires trust, fairness, capability, clarity and legitimacy.



From awareness  
to **action**. From  
resistance to **resilience**.

# THE HUMAN ADAPTATION ECONOMY

An interconnected system of markets created by climate adaptation needs

## DRIVERS OF ADAPTATION NEEDS

Climate impacts create human needs across every part of our economy and society.

**EXTREME HEAT**  
Rising temperatures threaten health, productivity and livelihoods.

**WATER SCARCITY**  
Growing stress on water resources for people, farms and industry.

**FLOODING**  
More intense floods disrupt homes, businesses and infrastructure.

**FOOD INSECURITY**  
Climate impacts threaten food production and supply chains.

**HEALTH IMPACTS**  
Heat, disease and air quality put health systems under pressure.

## THE ADAPTATION ECONOMY IN ACTION



**1. CLIMATE IMPACTS**  
Rising temperatures, extreme weather, resource stress.



**2. HUMAN NEEDS**  
People and communities need to adapt and stay safe and secure.



**3. MARKETS**  
Demand grows for solutions across sectors and geographies.



**4. INNOVATION**  
New ideas, technologies and business models emerge and scale.



**5. PRODUCTS & SERVICES**  
Solutions deliver value, resilience and improved outcomes.



**6. SOCIETAL RESILIENCE**  
Stronger communities, thriving economies, a better future.

## ENABLING SECTORS & CAPABILITIES

### THE HUMAN ADAPTATION ECONOMY

An interconnected system of markets created by climate adaptation needs.

**DIGITAL TWINS**  
Simulate, predict and optimise real-world systems

**WATER**  
Secure, clean and resilient water systems

**AGRICULTURE**  
Resilient food systems and soil health

**HEALTH**  
Protecting health in a changing climate

**CITIES**  
Resilient, inclusive and adaptive urban systems

**BUILDINGS**  
Comfortable, efficient and climate-resilient buildings

**INSURANCE**  
Managing risk and building financial resilience

**AI & DATA**  
Intelligence for better decisions and action

**NATURE**  
Healthy ecosystems that protect and restore

**BIO-MANUFACTURING**  
Low-carbon materials and bioproducts

## WHAT THIS MEANS



New human needs create new demand across every sector.



Markets evolve to meet those needs.



Innovation delivers new solutions.



Resilient societies and businesses thrive.

## WHO BENEFITS



**People**  
Safer, healthier and more resilient communities.



**Business**  
New markets, products and services.



**Planet**  
Restored, protected and sustainable ecosystems.



**Economy**  
Stronger, more resilient and future-ready growth.

EVERY CLIMATE IMPACT CREATES A HUMAN ADAPTATION NEED. EVERY NEED CREATES DEMAND. EVERY DEMAND CREATES A MARKET. EVERY MARKET CREATES AN OPPORTUNITY FOR INNOVATION.

# CLIMATE PULL INNOVATION

Climate change is becoming a defining force for innovation.

## TECHNOLOGY PUSH

We invent



New technologies create possibilities and improve efficiency.

## MARKET PULL

The market decides



Customer needs and market demand drive adoption.

## CLIMATE PULL

The climate changes the game

## CLIMATE PULL

Climate change creates urgent, unavoidable and universal demand for solutions.



### RISING HEAT

Heatwaves, extreme temperatures demand cooling, protection and resilience.



### FLOODING

More extreme rainfall drives demand for protection, resilience and recovery.



### WATER STRESS

Scarcity and quality challenges demand smarter water solutions.



### FOOD SECURITY

Disrupted systems require climate-resilient and sustainable food solutions.



### HEALTH IMPACTS

New health risks demand innovation in prevention, diagnostics and care.



### MORE POSSIBILITIES

Technology creates options we never had before.



### MORE CHOICES

Markets choose what is useful, desirable and viable.



### MORE URGENCY

Climate change creates needs that cannot be ignored.



### MORE IMPACT

Solutions that address climate needs deliver scale and meaning.



Climate is not just a constraint.  
It is a pull for innovation, investment and impact.

# THE HUMAN ADAPTATION ECONOMY

A NEW ECONOMY FOR A 1.5°C WORLD

## ANTICIPATE

See change coming and understand emerging risks and opportunities.



## ADAPT

Build resilience and respond with solutions that protect people and prosperity.



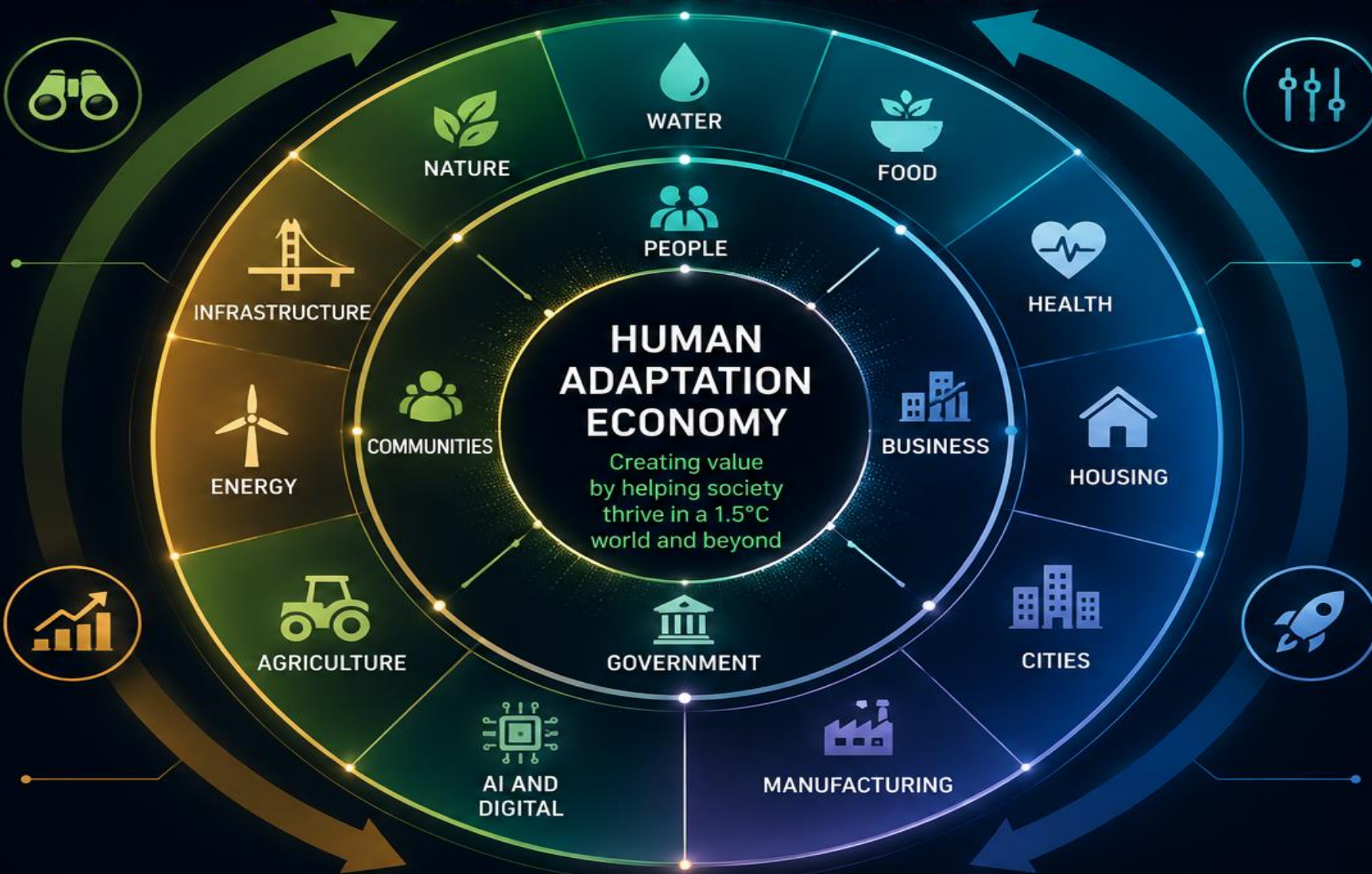
## ACCELERATE

Scale innovation and investment in adaptation solutions at speed and scale.



## ADVANTAGE

Turn adaptation into competitive advantage, growth and long-term value.



• PEOPLE • PLANET • PROSPERITY • RESILIENCE •

Anticipate change. Adapt with purpose. Accelerate solutions. Advantage for all.

### BIO-ALGAE REACTORS

Turning sunlight and CO<sub>2</sub> into food, fuel and materials.



### ATMOSPHERIC WATER GENERATION

Harvesting clean water from the air, anywhere.



### CLIMATE AI

Predicting risk.  
Optimising decisions.  
Protecting lives  
and assets.



### ADAPTIVE BUILDINGS

Buildings that sense, respond and adapt in real time.



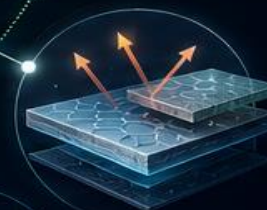
### FUTURE AGRICULTURE

Growing more with less. Restoring soil. Feeding a changing world.



### COOLING MATERIALS

Next-generation materials that reduce heat and save lives.



### DIGITAL TWINS FOR RESILIENCE

Simulating the future to strengthen cities, systems and communities.



## THE CEO CHALLENGE

# WHAT WILL YOUR BUSINESS BUILD FOR A 1.5°C WORLD?

“ The future will not be low carbon. It will be climate resilient. ”

Lead it. Build it. Own it.

### NATURE ENGINEERING

Working with nature to protect, restore and future-proof our world.



### CLIMATE HEALTH SOLUTIONS

Innovations for prevention, early warning and resilient health systems.



### NEXT-GEN INFRASTRUCTURE

Infrastructure that is modular, resilient and ready for the extremes.



### ADVANCED NATURE SOLUTIONS

Restoring ecosystems. Protecting coasts. Building natural resilience.



**ANTICIPATE**  
See risks first.



**ADAPT**  
Build resilience.



**ACCELERATE**  
Scale solutions.



**ADVANTAGE**  
Create lasting value.



The Human Adaptation Economy<sup>®</sup>  
is the next economy.  
**Be the architect of it.**

# THE PRODUCTS OF TOMORROW

INNOVATIONS FOR A 1.5°C WORLD AND BEYOND



## 1 BIO-ALGAE REACTORS

Turning sunlight and CO<sub>2</sub> into food, fuel and materials.



## 2 ATMOSPHERIC WATER GENERATION

Harvesting clean water from the air, anywhere.



## 3 CLIMATE AI COMMAND CENTRE

Predicting risk.  
Optimising decisions.  
Protecting lives.



## 4 ADAPTIVE BUILDINGS

Structures that sense, respond and adapt to their environment.



## 5 REGENERATIVE AGRICULTURE

Climate-resilient farming that restores soil, increases yields and stores carbon.



## 6 COOLING MATERIALS

Next-generation materials that reduce heat and save lives.



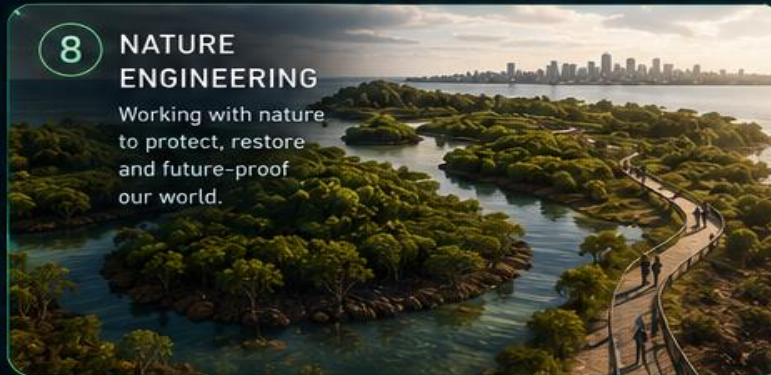
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Innovations for prevention, early warning and resilient health systems.



INNOVATE WITH PURPOSE



ADAPT WITH INTELLIGENCE



DELIVER LASTING IMPACT

# THE ROAD AHEAD: BUILDING THE HUMAN ADAPTATION ECONOMY

Five actions for leaders to create value, build resilience and help society thrive in a 1.5°C world

**1**  **EMBED ADAPTATION IN STRATEGY**

Make adaptation a core business priority. Understand your climate risks and opportunities across your value chain and communities.

 **Outcome:**  
Stronger strategy, long-term value creation.

**2**  **INVEST IN SOLUTIONS THAT MATTER**

Fund innovation and partnerships that deliver real-world adaptation solutions for people, nature and infrastructure.

 **Outcome:**  
Scalable impact and new market opportunities.

**3**  **COLLABORATE FOR RESILIENCE**

Work across sectors, with government and communities to build systems that are inclusive and resilient.

 **Outcome:**  
Shared risk, shared value, stronger communities.

**4**  **MEASURE, DISCLOSE AND LEARN**

Use robust data and transparent reporting to track progress, learn faster and build trust with stakeholders.

 **Outcome:**  
Better decisions, accountability and continuous improvement.

**5**  **EMPOWER PEOPLE AND CULTURE**

Build the skills, mindset and leadership culture to adapt, innovate and deliver positive change at every level.

 **Outcome:**  
Engaged people, strong culture, sustainable change.

A THRIVING WORLD  
FOR PEOPLE AND PLANET



Resilient communities  
Healthy ecosystems  
Inclusive prosperity

2030  
SCALE SOLUTIONS

2027  
BUILD PARTNERSHIPS

2025  
TAKE ACTION

ANTICIPATE  
ADAPT  
ACCELERATE  
ADVANTAGE



**THE TIME TO ACT IS NOW.**

The Human Adaptation Economy is not a distant future – it is a choice we make today for a better tomorrow.



**ANTICIPATE**  
See risks first.



**ADAPT**  
Build resilience.



**ACCELERATE**  
Scale solutions.



**ADVANTAGE**  
Create lasting value.