

## **Making Money Matter for Climate Action**

*The following keynote was delivered by Mark Carney at the Southbank Centre on 10 July 2023 as part of 'Planet Summer', a season of events responding to the climate emergency.*

### **Remarks (c.2100)**

Good evening. It's an honour to join Southbank's Planet Summer series. You are the truly committed: trading a summer evening to challenge finance and economics to be part of the climate solution.

When people think the economy and finance, Adam Smith often comes to mind.



Indeed, when I became Governor, Adam Smith was literally the face of money, gracing the £20 note.

Just as there are two sides to any coin (or banknote), there are two sides to Adam Smith. On one side is the caricature—the “father of the free market”—whose unquestioned worship has helped drive the climate crisis.

The other side – is that of moral sentiments – or how values can channel markets to help address our greatest problems.

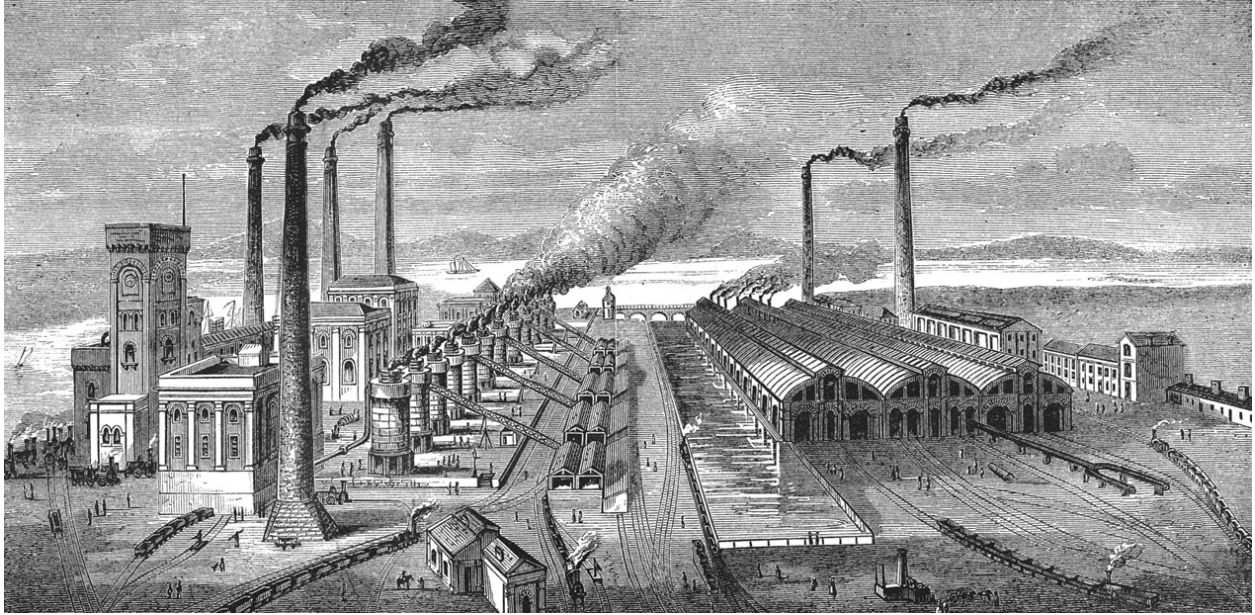
And this is my topic this evening, ***how to make money matter for climate action***, in other words how we can use value to achieve our values.

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To illustrate these two sides, consider two Glasgows...

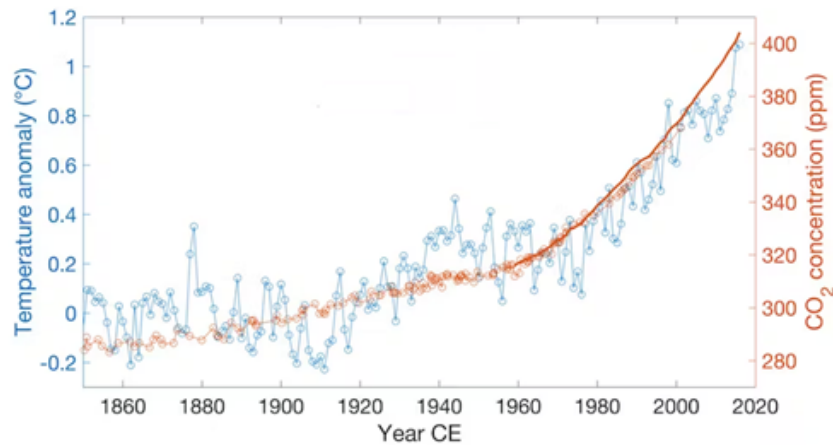
The first is the Glasgow of Adam Smith.

It is the 18<sup>th</sup> century, the dawn of the Industrial Revolution and the rise of the Invisible Hand.



As the industrial revolution spread, the earth's climate began to change. Since the publication of Smith's *Wealth of Nations*, carbon dioxide in the atmosphere has risen to its highest levels in 800,000 years. Our planet's average temperature is already 1.2° Celsius warmer. The last eight years have been the warmest on record. Extreme weather events have multiplied more than three-fold. I have come here from Canada where our planet is literally burning.

## Warming Climate Leading to More Extreme Weather



The last  
**8**  
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**3X**  
Increase in extreme  
weather events since 1980

While climate change is a product of physics, the incentives that drive it reflect our human nature and the markets we have created.

The revolution in economics that began at the height of the Industrial Revolution led to the view, widespread today, that the price of everything is the value of everything.

The central concept that links all of Smith's writings was the idea that continuous exchange forms part of all human interactions-- exchanges of goods in markets, exchanges of meanings in language, and exchanges of regard in the formation of moral and social norms.

Smith believed that we form our norms or values, by wishing ‘to love and to be lovely’—that is, to be well thought of or well regarded. We receive feedback by perceiving how others judge us. This leads us to develop first habits, and then principles, of behaviour. So moral sentiments or values are not inherent.

Smith also argued that markets determine the distribution of value, which is derived from the factors of production, particularly labour.

In the late 19th and early 20th centuries, a group of economists, (the neo-classicists), launched an upheaval comparable to the Copernican revolution that transformed astronomy by moving its axis from the earth to the sun.



The neo-classicists shifted the axis of economics from the factors of production to the perceived value of goods to the consumer. From the objective to the subjective.

Value is in the eye of the beholder, not in the sweat of the labourer.

The view that market outcomes always equal value creation gives rise to three economic tragedies that have driven the climate crisis.



The first arises from market failures—the tragedy of the commons – the externalities that in the nineteenth century led to the destruction of common grazing lands in England and Ireland, and that today are destroying the world’s rainforests.

Second, human frailties create a tragedy of the horizon. We are irrationally impatient, and the catastrophic impacts of climate

change will fall largely on future generations. For an issue that can only be solved in the present, we must value the future.

Third, equating price with value leads to a drift from moral to market sentiments. Too often, decisions are made by summing up prices with no sense of priority or any consideration of their distribution. And that which isn't priced – like nature or community – is ignored. This encourages trade-offs of growth today and crisis tomorrow, of health and economics, of planet and profit.

Fortunately, as Adam Smith emphasised, moral sentiments can change. And in recent years, the combination of clear social goals, the growing credibility of climate policies and forward-looking investor expectations create the potential of a virtuous cycle that breaks these tragedies.

And not before time because we need a sustainable revolution on the scale of the Industrial revolution and at the pace of the digital transformation.

This revolution will require enormous investment – around \$3 trillion / year globally, year in and out for decades.

***These huge sums are achievable if we harness private capital. The simple fact is that, given the scale of the climate challenge, we won't get to net zero without innovation, investment, and profit.***

Having worked at the centre of markets all my professional life, I know they are the most powerful instrument we've ever created. Their dynamism can be harnessed to serve great purposes.

But markets are also indifferent to human suffering and can be blind to our greatest needs. That's why those who default to laissez faire leave us unprepared for the future.

Put simply, markets don't have values, people do. And we must close the gap between what we value and what the market prices. After all, we're living in a time when financial markets rate Amazon as one of the world's most valuable companies, but the value of the Amazon region appears on no ledger until it is stripped of its foliage and converted into farmland.

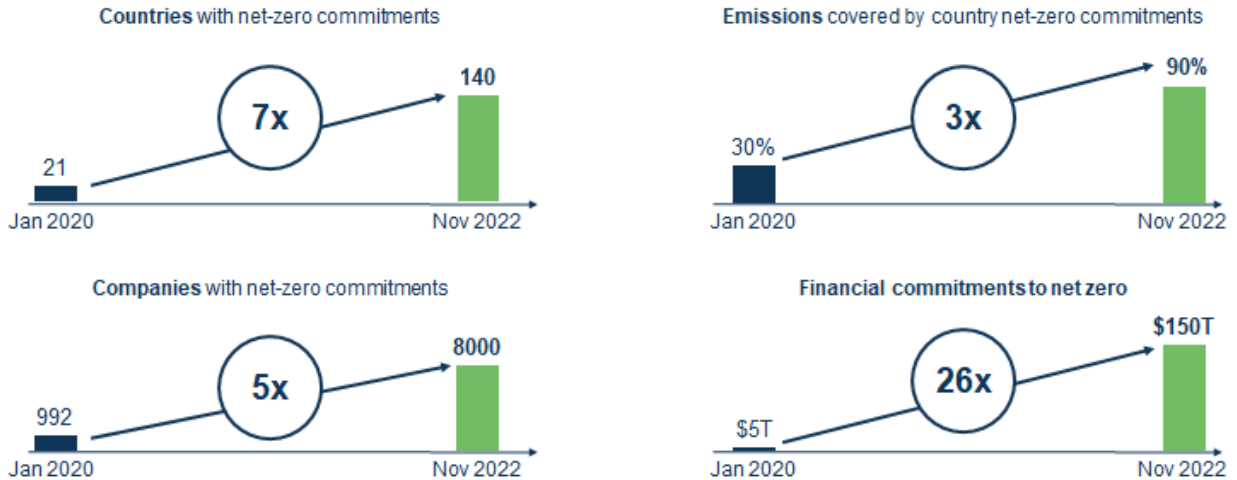
***That brings me to the second Glasgow***, that of COP26. Where countries, companies and communities launched the sustainable revolution, to put the market into the service of humanity.

When society sets a clear goal, it becomes profitable to be part of the solution and costly to remain part of the problem.

***That momentum is building...***



## Net-Zero Transition Accelerating



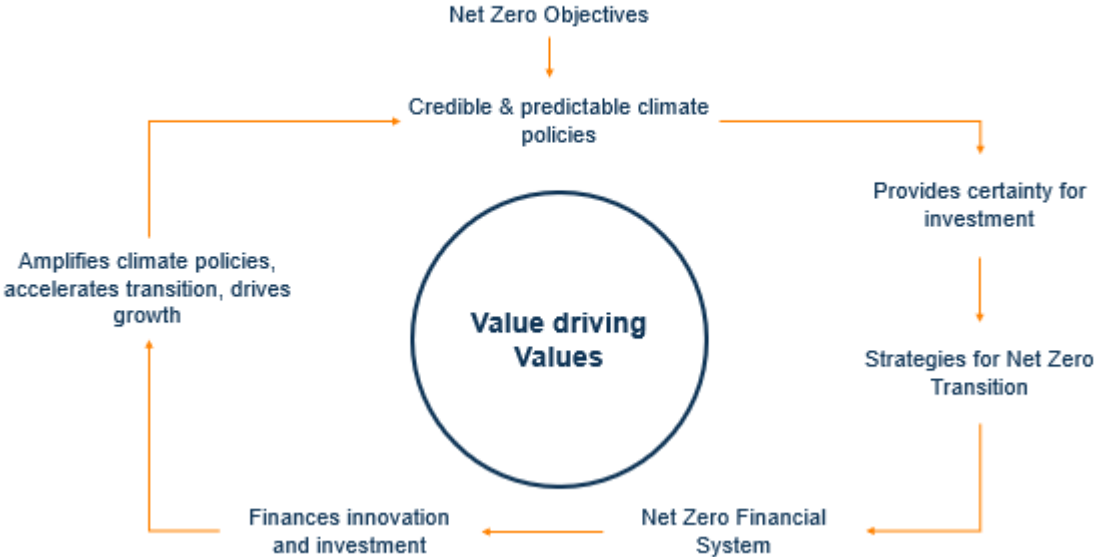
By the Glasgow, the proportion of global emission covered by country net zero targets had risen from 1/3 to 90%. Commitments that have quickly cascaded down to leading companies and financial institutions.

Once you have a commitment, you need a plan.

Credible and predictable government climate policies encourage investors to pour in money in anticipation of this transition,

creating a virtuous circle of large-scale investment, faster decarbonisation, more jobs, and faster growth.

### Credible Policies Amplify and Accelerate Investment



Momentum is building in global climate policymaking.

Before Paris, climate policies were consistent with a trajectory of over 3.5C of warming by the end of the century. By Glasgow, NDCs were consistent with 2.4 degrees, and country commitments, if fulfilled, would limit warming to 1.8 degrees.

The Inflation Reduction Act puts the US close to the path for its target 50% reduction in greenhouse gas emissions by 2030.

Canada is largely matching US incentives, and the EU that is using a combination of sticks, carrots and promises of better delivery. The world's biggest emitter, China, is well on the path to

overachieving its CO2 intensity target for 2030.<sup>1</sup> India's 2030 intensity target increasingly looks within reach.<sup>2</sup>

In this environment, private finance can be decisive. The more our financial sector focuses on the transition to net zero, the more that new technologies will be financed in anticipation of climate action, and the more savers and investors will be able to track whether their investments are consistent with their values. Sustainable investing can shift from the fringes to the mainstream, driving the transformation.

This is how values drive value.

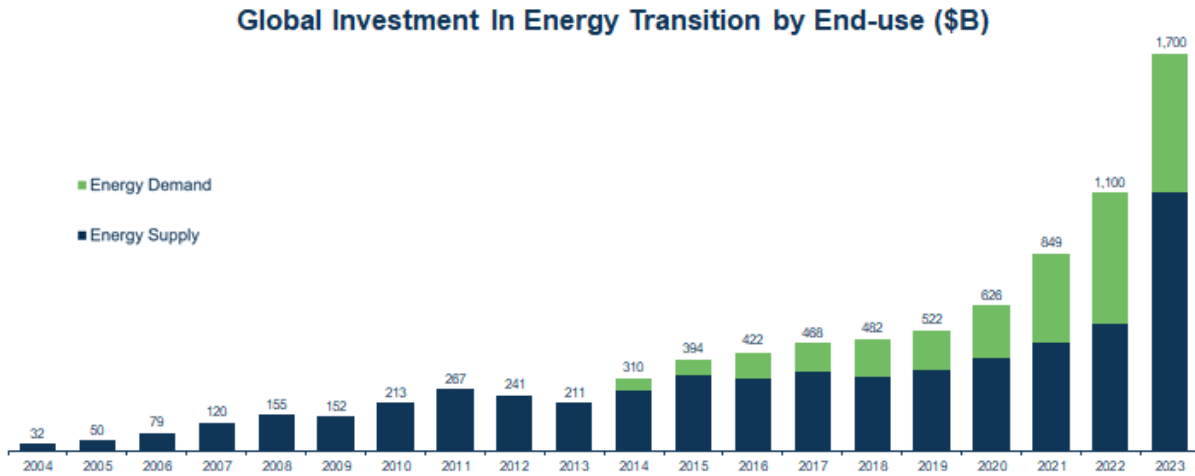
**The hardening of the social consensus for addressing climate change has been a catalyst for an explosion in clean energy investment. [slide]**

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<sup>1</sup> EU – According to the IEA, Repower EU will enable the achievement of 80% of 2030 targets for renewable electricity and transport.

<sup>2</sup> India's policies put it on track to achieve 100% of the 45% emissions intensity reduction by 2030 from 2005 levels and 50% energy from renewable sources by 2030. Currently the government is updating policies in order to meet the 500GW renewables capacity target

## Energy Transition Investment at an Inflection Point



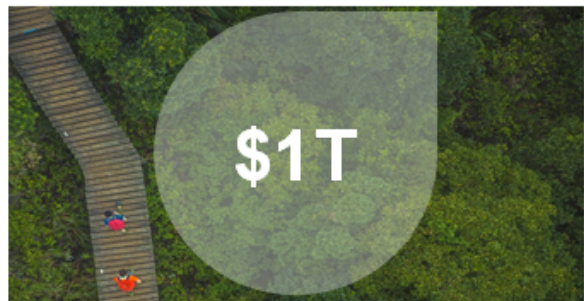
However, while this progress is encouraging, it remains insufficient.

We need to go even faster and broader.

But Energy Transition must Ramp further and Broaden Globally



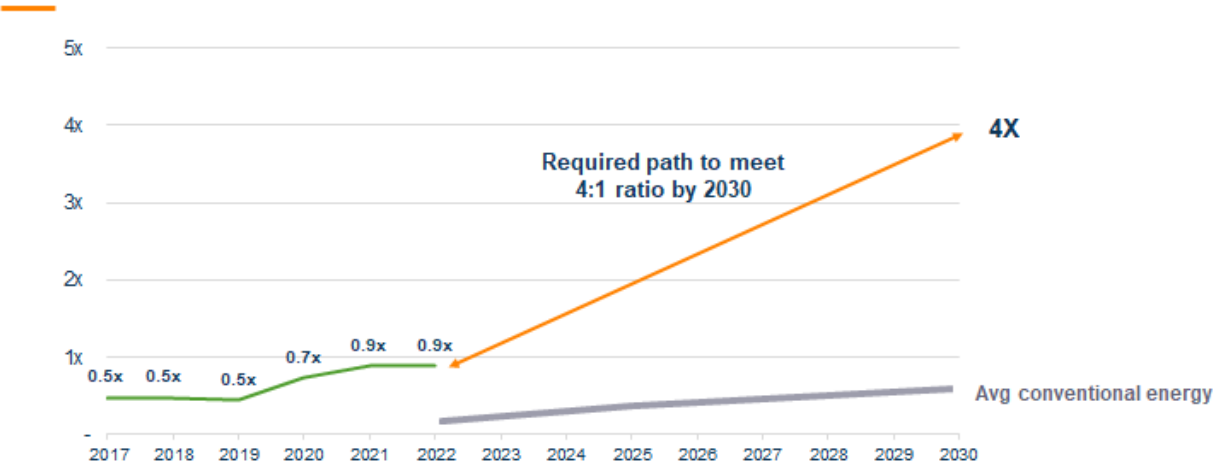
Clean energy/fossil fuel investment



Additional annual clean energy investment in EM&DEs

**Clean energy must treble this decade. And the ratio of clean-to-conventional energy investment must go parabolic.**

**Clean-to-Conventional Energy Investment Ratio must Rise Sharply**



***Oil and gas companies are unlikely to be a big part of the solution...***

At present, major oil and gas companies are only spending about 1/3 of their capex on renewables. And on current plans, the investment of leading oil majors is likely to remain well below the 4.1 needed by 2030.

Thus, the bulk of clean energy investment is likely to come from outside traditional energy powerhouses through utilities, developers, and decarbonisation platforms.

***The second challenge is that there is a large shortfall in transition finance for EMDCs.***

**Huge Shortfall in Energy Transition Finance for Emerging Markets and Developing Countries**



To achieve the \$1 trillion of additional capital required, scarce public finance must catalyse significant private finance.

Through guarantees, risk insurance, and blended finance, MDBs must concentrate on bearing the risks the private sector will not, including currency and political risks, and poor regulatory frameworks.

Voluntary carbon credit markets have the potential to provide major sources of cross border finance from companies in advanced economies to emission reduction projects in developing economies. In recent years, there has been huge progress in

building frameworks for supply integrity and demand integrity in these markets. The UAE's COP28 is the opportunity to grasp the nettle, finalise these initiatives, so that voluntary carbon markets can support the managed phaseout of high-emitting assets, the rapid deployment of clean energy, and the preservation of biodiversity.

***This opportunity underscores that we need a financial revolution...***

Financing the Industrial Revolution required fundamental changes to the nature of private banking, the focus of central banking, and scope of the international monetary system. The Net Zero Revolution requires changes at least as bold.

This requires put in place the information, tools, and markets so that every financial decision takes climate change into account – to create a financial system in which a company's contributions to climate change and climate solution are fundamental determinants of its value.

So that value reflects values.

## Energy Revolutions Require Financial Revolutions

### Industrial Revolution

#### Fractional Reserve Banking

- Maturity transformation
- Financial leverage

#### Central Banks

- Lender of last resort
- Supervision of banks

#### International Monetary & Financial System

- Gold standard
- Free flow of capital

### Sustainable Revolution

#### Financial System

- Aligning with Net Zero transition
- 'Carbon' leverage

#### Central Banks / Supervisors

- Climate disclosure
- Supervision of transition risks

#### International Monetary & Financial System

- Blended finance
- Transition-aligned private flows
- Carbon markets

We are making huge progress on this essential plumbing. And we're quickly mainstreaming the imperative that all major financial institutions develop and implement aggressive plans to decarbonise.

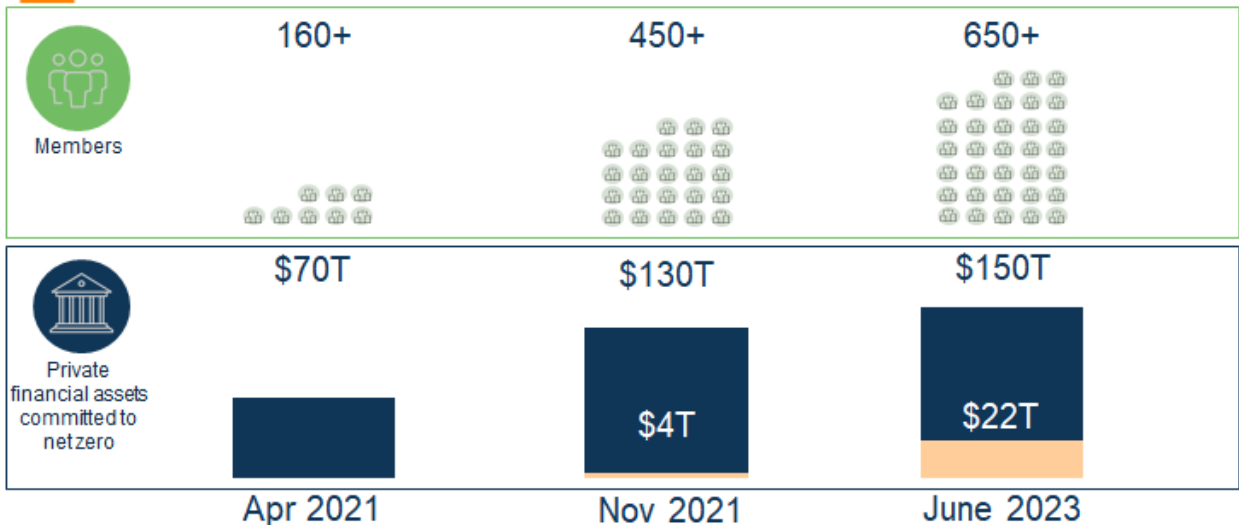
Finance on the scale required—\$3 trillion per year of additional clean energy financing needed by 2030<sup>3</sup>—is now in prospect. As part of GFANZ, over 650 major financial institutions from 50 countries are committing to manage their balance sheets, totalling over \$150 trillion of assets, in line with a 1.5-degree net zero transition.<sup>4</sup> Amongst the asset managers along over \$20 trillion is already aligned.

<sup>3</sup> Clean-energy related finance in 2030. Source: International Energy Agency, World Energy Outlook 2021, Fig 1.11

<sup>4</sup> [www.gfanzero.com](http://www.gfanzero.com)



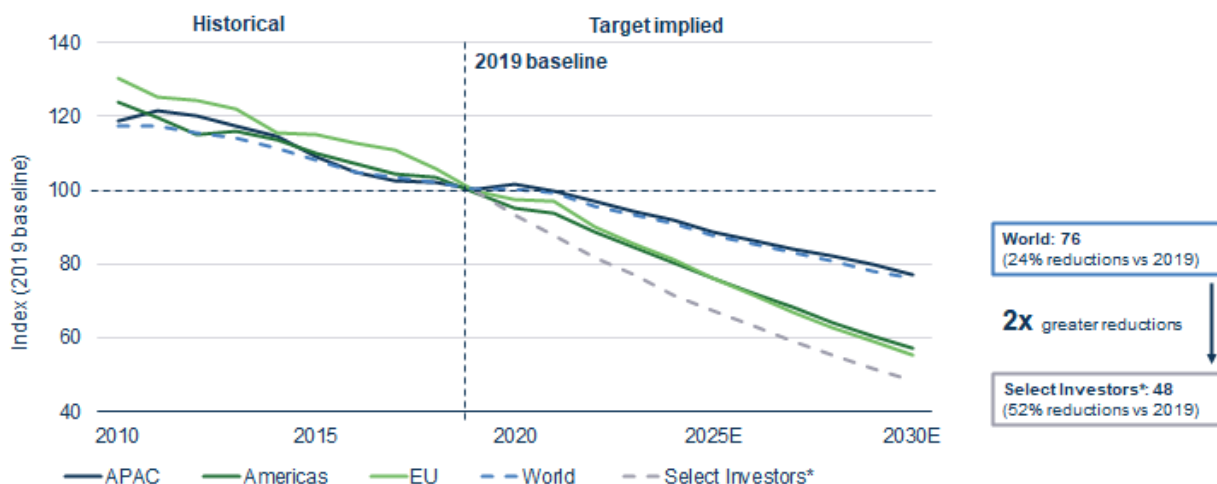
## Mainstreaming Net-Zero Finance



### *...driving transition across the economy*

The net zero financial plumbing helps investors identify opportunities in the transition to net zero. This pulling forward the transition, rewarding those with plans to decarbonise at twice the rates of countries as a whole.

## Net-Zero Commitments are Pulling Forward the Transition

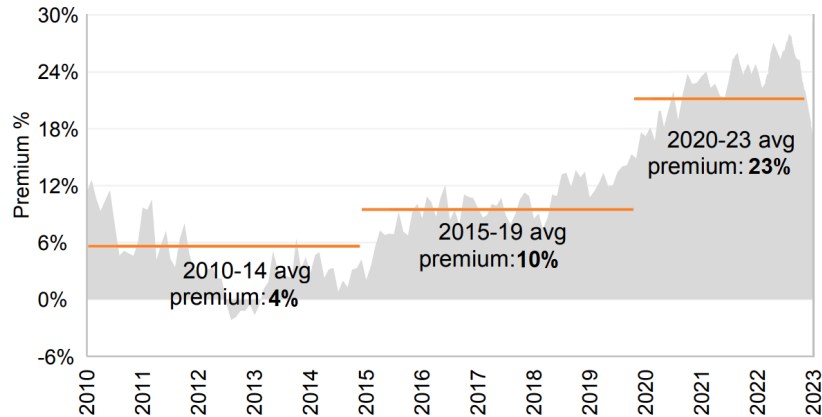


Because, given that climate change is an existential risk, it follows that companies that are part of the solution will create enormous value.

As the financial sector transforms, private finance is becoming a transition force multiplier by increasing the valuation premiums of companies that outperform in decarbonisation.

Values re driving value....

## Low Emitting Companies are Trading at Rising Premiums Across Sectors



### *How We change the system*

Of course, finance can't do the job on its own. Finance is an enabler, a catalyst that will speed the transition, but catalysts still need the underlying components, in this case the climate policies of countries and the power of people demanding change.

That's where all of us come in: by combining Smith's Moral Sentiments with his Invisible Hand. The Glasgow of today with the Glasgow of His day.

## Conclusion



### Making Your Money Matter for Climate Action

- ✓ **Credible and predictable climate policies** accelerate private investment
- ✓ **A net zero financial system** amplifies the impact
- ✓ Climate transition requires massive investment for real world decarbonisation
- ✓ **'Going where the emissions are'** creates jobs and drives growth
- ✓ Your choices can ensure **market Value supports Your Values**

First, ask not what the climate is doing to your country but what your country can do for the climate. Does it have a credible net-zero plan, that transitions energy, transportation, and key industries to grow jobs and the economy?

Second, if you work for a company, find out whether they have a plan for net zero. If so, great. How can it be made better? And if not, does management think governments and people are bluffing with their net-zero targets?

Third, wherever you put your hard-earned savings – a bank, a pension pot, or the stock market – find out whether it is being managed towards net zero.

Ask if your financial institution is part of GFANZ. If not, why not? Are the people investing your money missing out on the major opportunities of the net zero transition? Are they taking unnecessary climate risks? Or do they think you just don't care? If you care about the climate, make your money matter.

Finally, all your actions through climate-smart consumer choices to initiatives such as greening your neighbourhood, engaging with corporations to demand more sustainable packaging, and through holding to account those who manage your savings may seem small relative to the scale of the challenge, but they all matter.

By living the values of sustainability and responsibility in tackling climate change, you will inspire others. And collectively these efforts, by demonstrating a social consensus are helping to shift market values, putting them in service of our human values.