Value(s) in the Net Zero Transition

VANTAGE

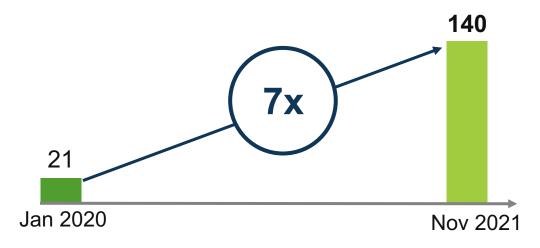
MARK CARNEY
JUNE 2022

The Net Zero Transition: a question of Value(s)

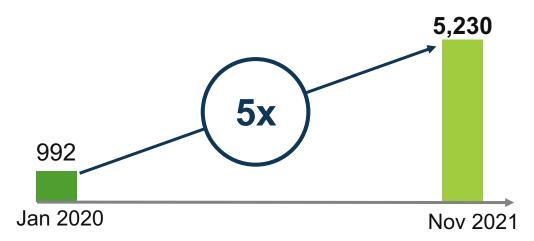
- Widespread view that price equals value (Amazon vs the Amazon)
- Tragedies of the Commons and the Horizon have been driving the climate crisis
- Emerging consensus on sustainability creates hierarchy for values to drive value
- Climate action requires clear objectives, credible climate policies and a Net Zero financial system
- Net zero transition plans mainstreaming driving demands for capital/solutions creating an enormous commercial opportunity

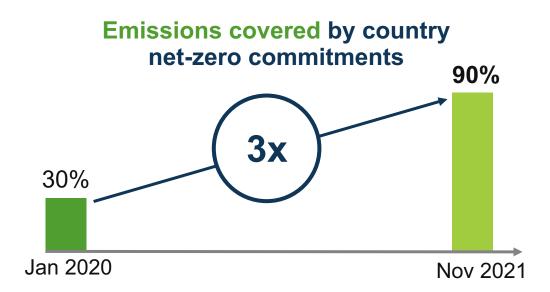
Net-zero transition is accelerating

Countries with net-zero commitments

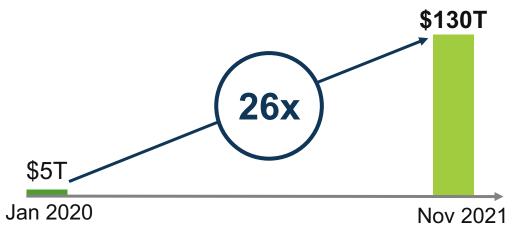


Companies with net-zero commitments

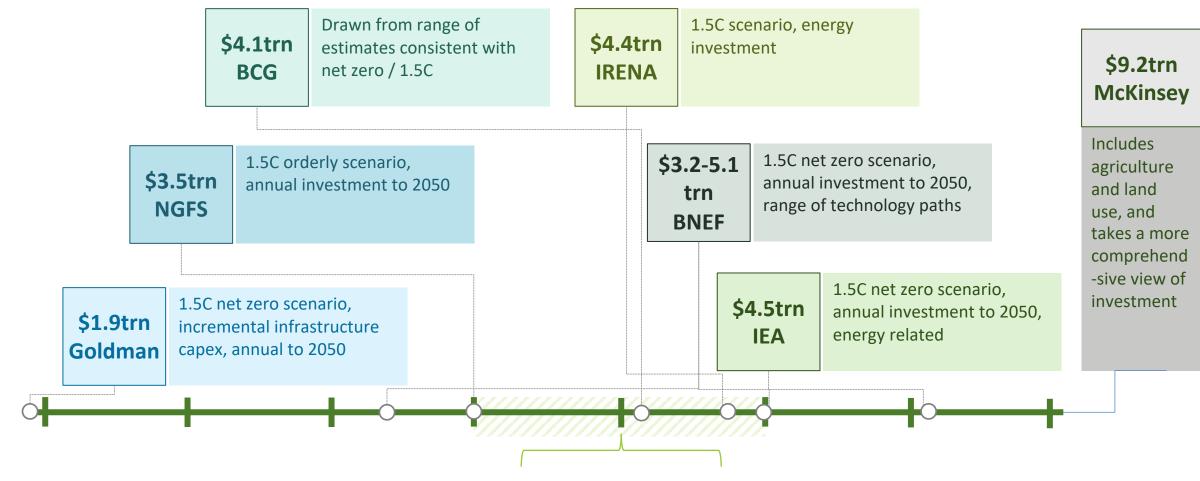




Financial commitments to net zero

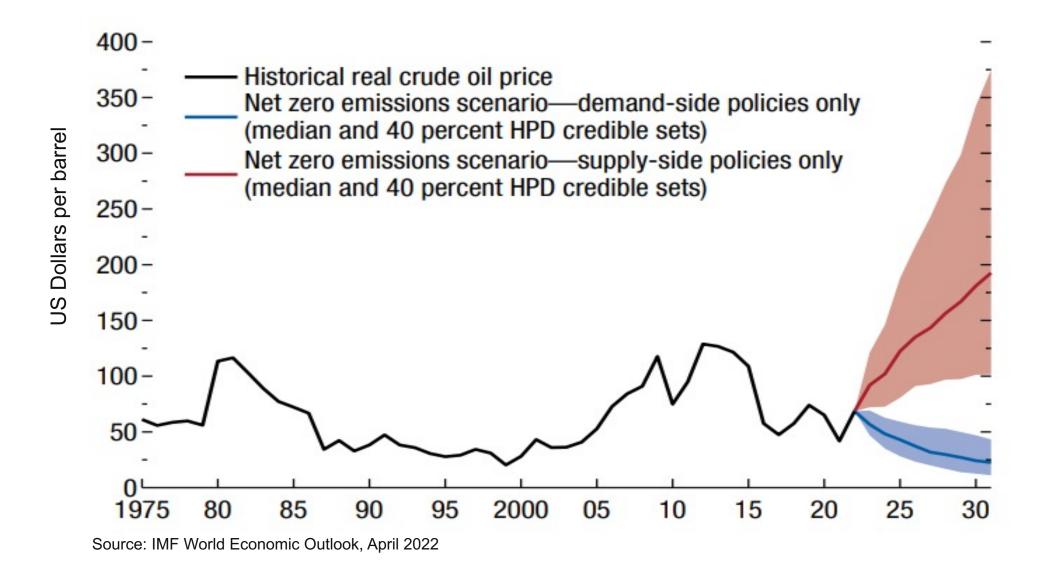


Annual investment for net zero must double to around \$4trn/yr

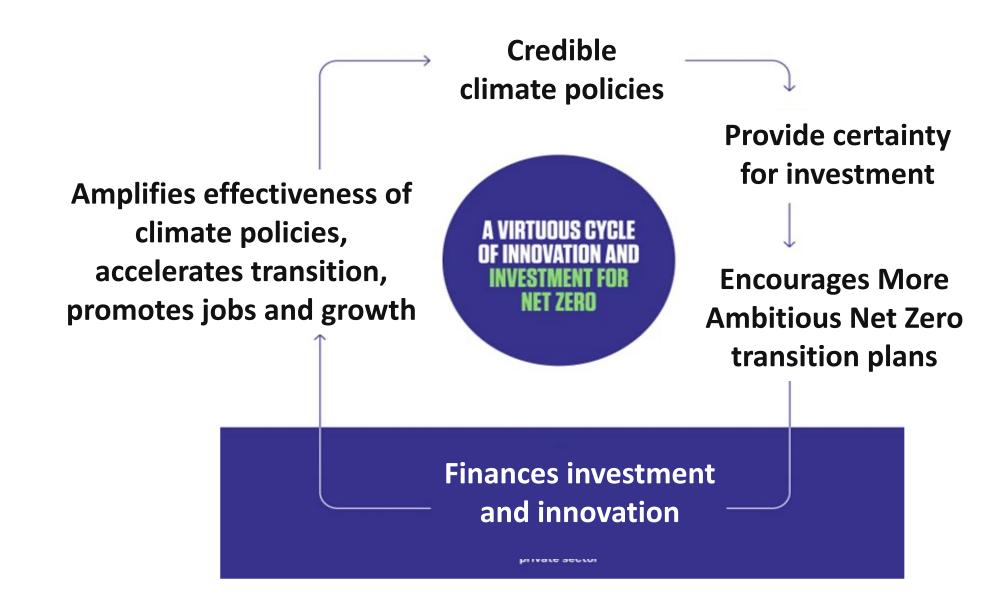


Estimated range: \$3.5trn - \$4.5trn a year

Oil prices depend heavily on the nature of Net Zero transition



Credible & predictable policies amplify & accelerate investment



Credibility means that 'less is more'

Required Carbon price



COP26 Key Takeaways

- 1.5 'still alive' with formal agreement, G20 pact, and increased country pledges
- 'Mind the (policy) gap': 1-year review to drive more ambition
- Deep decarbonization gaining momentum (methane, deforestation, and coal)
- COP rule book finalized: large-scale carbon offset markets now possible
- Growing private sector leadership
- Net zero financial system being built to drive capital/solutions

Energy Revolutions Require Financial Revolutions



Industrial Revolution



Sustainable Revolution

Fractional Reserve Banking

- Maturity transformation
- Financial leverage

Central Banks

- Lender of last resort
- Supervision

International Monetary & Financial System

- Gold standard
- Free flow of capital

Financial System

- Aligning with Net Zero transition
- 'Carbon' leverage

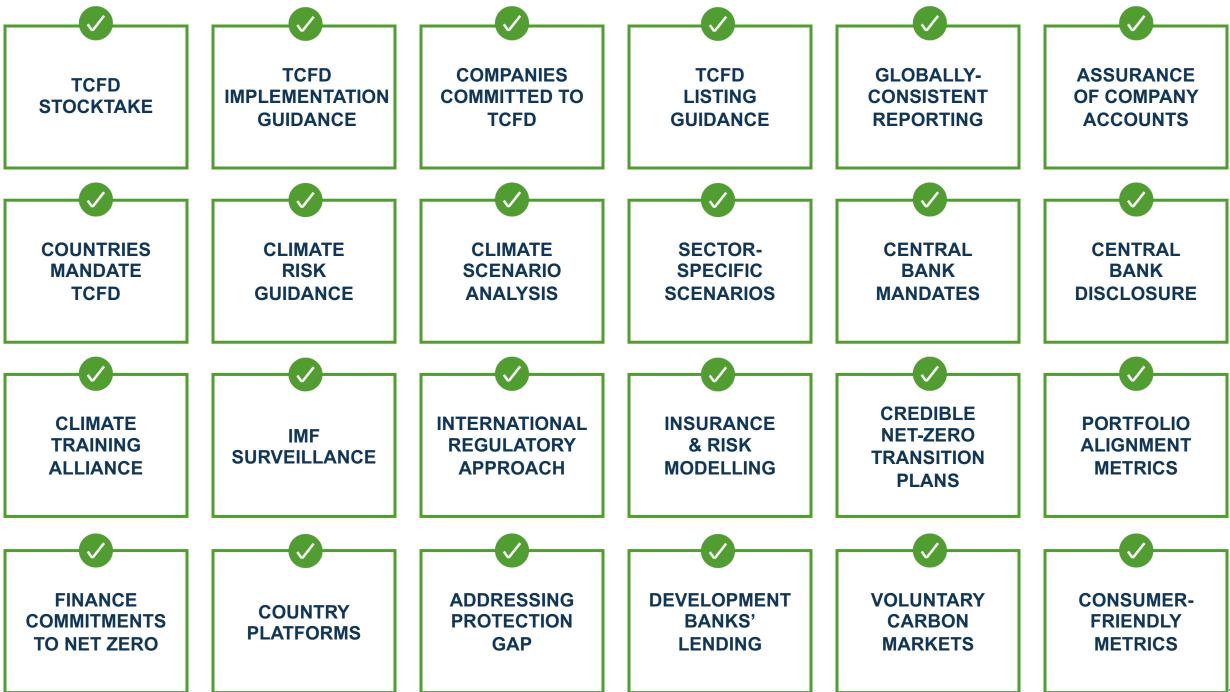
Central Banks / Supervisors

- Climate disclosure
- Supervision of transition risks

International Monetary & Financial System

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

Creating a Financial System where every decision takes climate change into account



Core elements to support transition in mainstream markets

Mandatory TCFD disclosure (ISSB & SEC)

Widespread Climate stress testing

Science-based transition plans

Portfolio alignment

Frameworks to phase out stranded assets

GFANZ spans the global financial sector

Net Zero Asset Owners Alliance

Members: 69 investors representing **\$10.5tn**

Commitments: transition portfolios to net zero emissions by 2050, publishing interim targets every 5 years, starting with 2025

Structure: UN convened

Net Zero Asset Managers Initiative

Members: 220 AMs representing \$57tn

Commitments: interim 2030 target for proportion of assets to be managed in line with net zero by 2050. Review target every 5 years, working for 100% asset coverage by 2050.

Structure: led by Investor Agenda (IIGCC, AIGCC, Ceres, IGCC, CDP, PRI) Net Zero Banking Alliance

Members: 102 banks representing \$67tn

Commitments: align operational and financed emissions with net-zero by 2050 or sooner, including 2030 interim targets

Structure: industryled, co-founded by UNEP FI and HRH's Sustainable Markets Initiative (SMI). Paris
Aligned
Investment
Initiative

Members: 53 asset owners representing \$2.9trn

Commitments: transition investment portfolios to net zero emissions by 2050, including 2030 interim targets

Structure: convened by IIGCC, Ceres, AIGCC and IGCC

Net Zero Insurance Alliance

Members: 21 (re)insurers

Commitments: members commit to transition underwriting portfolio to net zero emissions by 2050, including 2030 interim targets

Structure: Uconvened Net Zero Financial Service Providers Alliance

Members: 23 across credit rating agencies, data providers and listing exchanges

Commitments: align services and products to support financial firms to reach net zero by 2050 or sooner, consistent with a maximum average global temperature rise of 1.5°C above pre-industrial levels

Formalised in international architecture



Reports into the FSB, ensuring policy recommendations and workstream outputs captured in international regulations



Underpinned by the rigour of UNFCCC's Race to Zero. Criteria set by independent expert group of academics, scientists and NGOs/

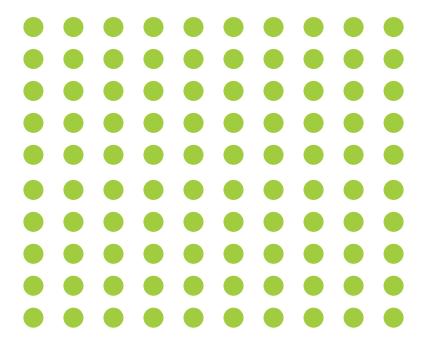


Regional hubs in Asia and Africa to ensure geographic representation and reach

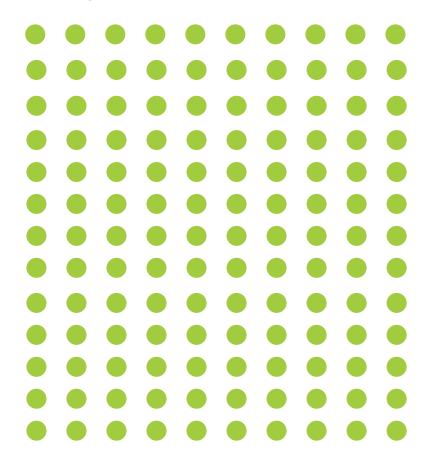
40% of the world's financial assets are now pledged to net zero

\$130 TRILLION





FINANCE NEED FOR NET ZERO THROUGH 2050



FINANCE COMMITTED TO NET ZERO THROUGH GFANZ

Helping to End the Tragedy of the Horizon



Translating net zero pledges into climate action

Transition-consistent Energy Financing

Transition plan framework for financial institutions

Guidance for real-economy company transition plans

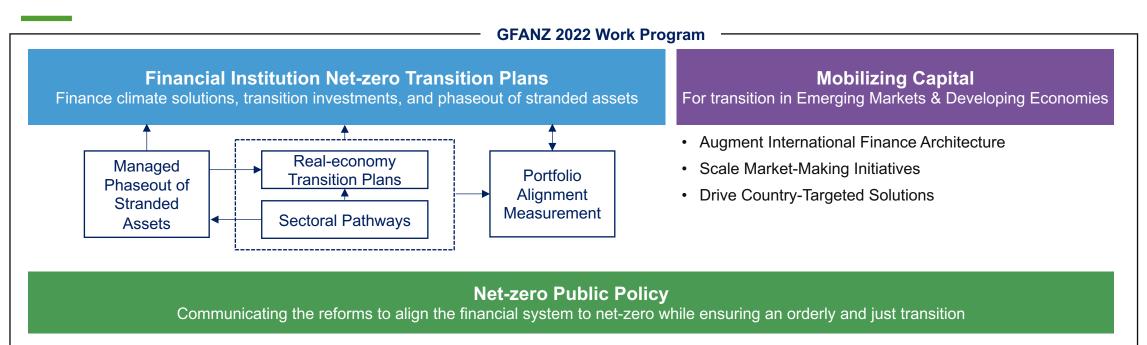
Guidance on decarbonization pathways across sectors

Guidance on portfolio alignment

Frameworks to phase out high-emission assets

Just Energy Transition Partnerships for EMDE Transition Financing

GFANZ Work Program



Building blocks of net-zero financial system Standard-setting and disclosure Science and industry-based **Nationally Determined Contributions** Data availability pathways (e.g. IPCC, IEA, OECM, requirements (e.g., TCFD, (NDCs) and country climate plans and comparability ISSB, SEC, EFRAG) SBTi, MPP) Carbon markets and undergirding Other climate-aligned policy Net-zero measurement/accounting Taxonomies and infrastructure (e.g., PCAF, GHG Protocol) classification systems and regulation (e.g., CCPs)

Decarbonization is an enormous value-creation opportunity



A global imperative that has accelerated over the last two years

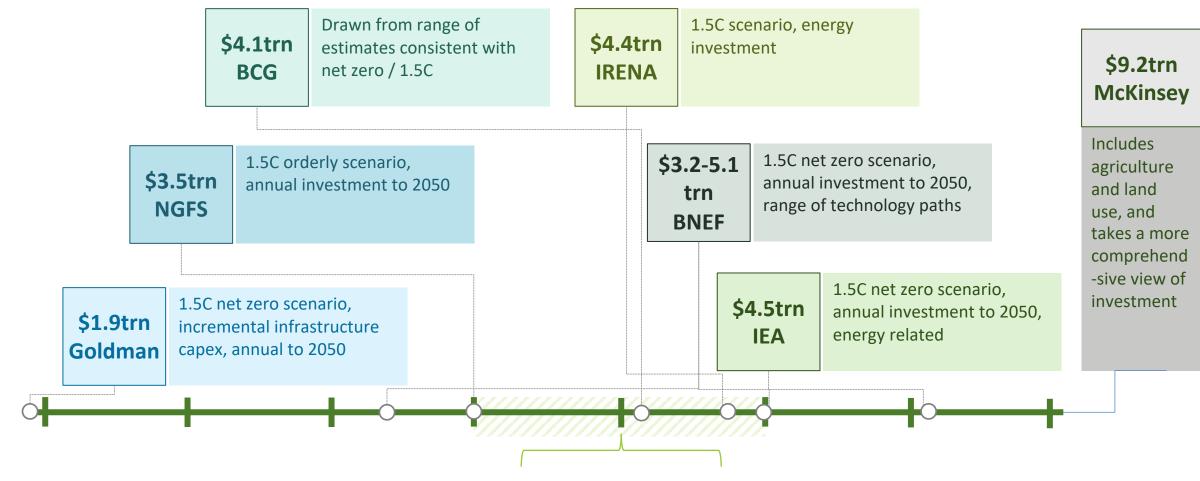


Requires a global, wholeeconomy transition



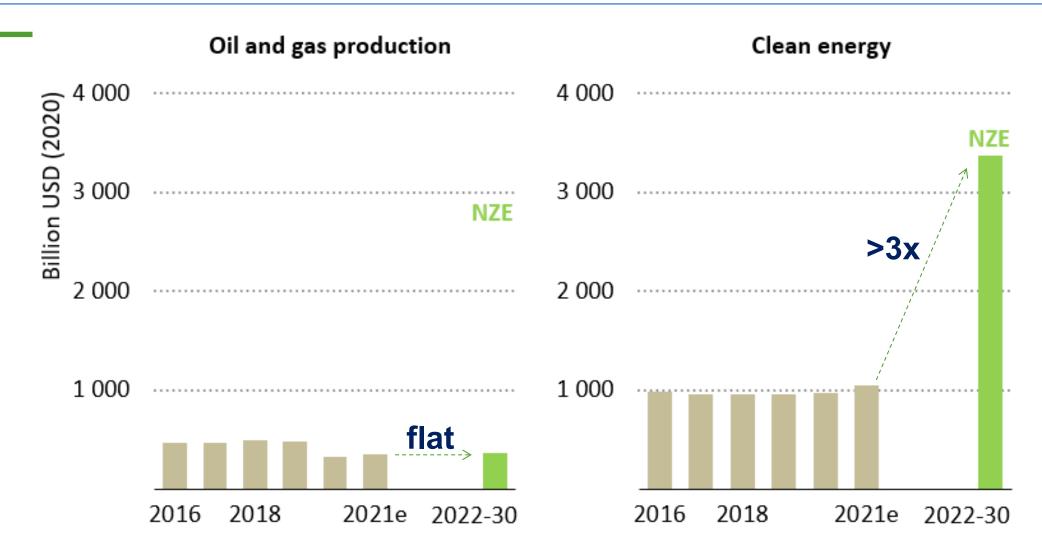
Creating a massive economic opportunity, requiring significant capital and deep operating expertise

Annual investment for net zero must double to around \$4trn/yr



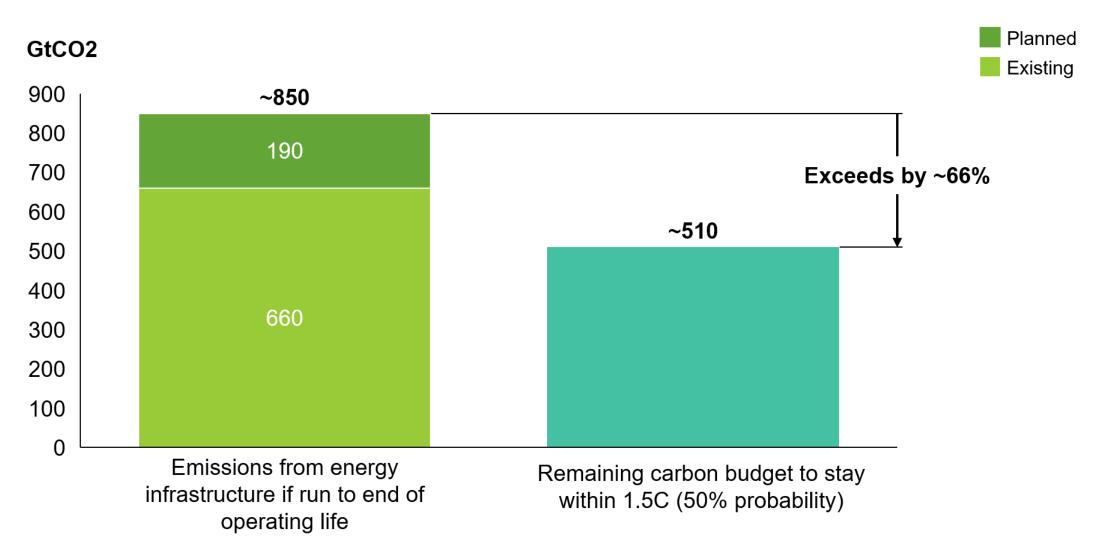
Estimated range: \$3.5trn - \$4.5trn a year

Fossil fuel investment in line but clean energy not rising fast enough



Source: IEA World Energy Outlook 2021

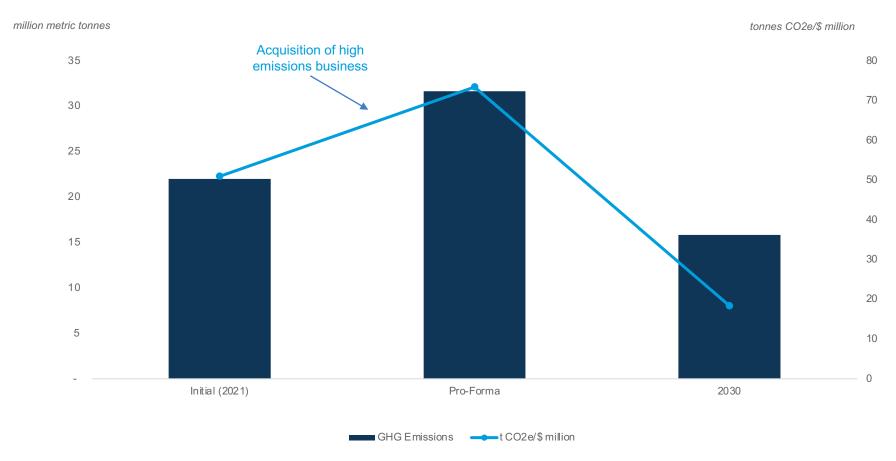
Enormous Stranded Assets



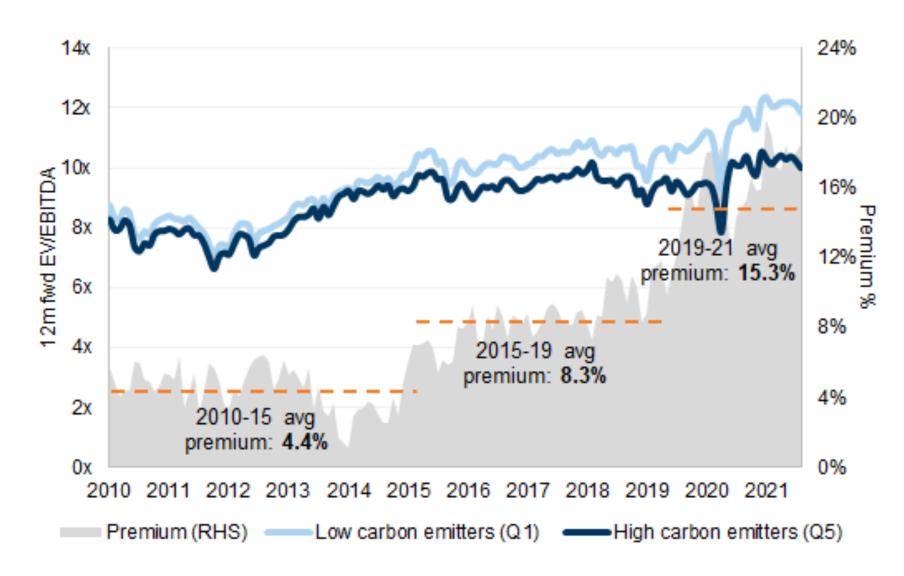
Source: IPCC. Climate Change 2022, Mitigation of Climate Change

'Going where the emissions are' drives impact...





... and Value: low emitting companies already trade at premiums



Outstanding Macro Issues

- Implementation of more ambitious country policies to close policy gap
- Develop country platforms to scale \$1 trillion in annual capital flows to EMDEs
- Complete financial architecture of Net Zero (mandatory transition plans, reweighting of passive indices, integration of carbon offset markets)
- Energy transition underspecified (need comprehensive approach including managed phase out of stranded assets)
- Increased focus on Nature and Just Transition

Potential LAPP/AIMCO Considerations

- Engagement strategy with portfolio companies
- Appetite for carbon accretion / dilution
- Measuring and managing transition alignment across public & private portfolios
- Risk management including terminal values under multiple scenarios
- Strategies for 'Breakthrough' technologies, Offsets and Nature
- Engagement with GFANZ, regulators and policymakers to help complete the financial architecture of Net Zero

The Net Zero transition is a global imperative and an enormous commercial opportunity