

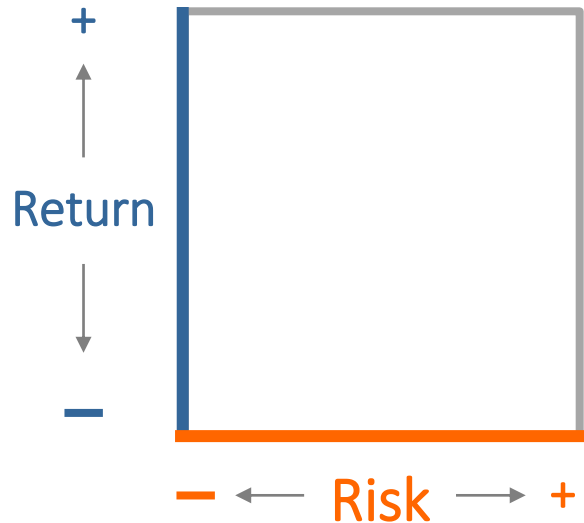
## **Sustainable Investing Research**

September 2022

# A PARADIGM SHIFT IN INVESTING

## 2-D Approach: Deliver the Highest Return Per Unit Risk...

(Incorporating ESG if pertinent for return/risk)

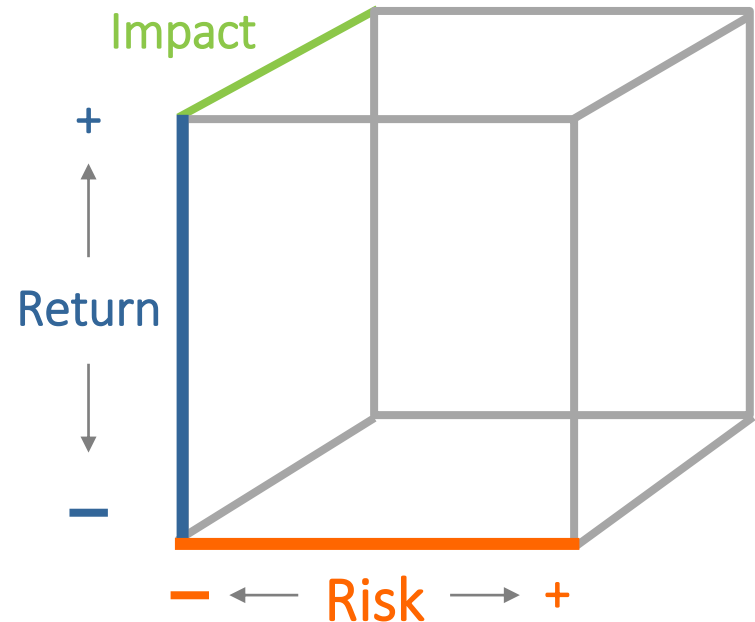


### Examples:

- *Impact of climate transition on commodity supply/demand*
- *Risk controls addressing climate transition*

## 3-D Approach: ...& Align Portfolio with Positive Real-World Impact

(Sustainability integrated in all securities alongside risk/return)



### Examples:

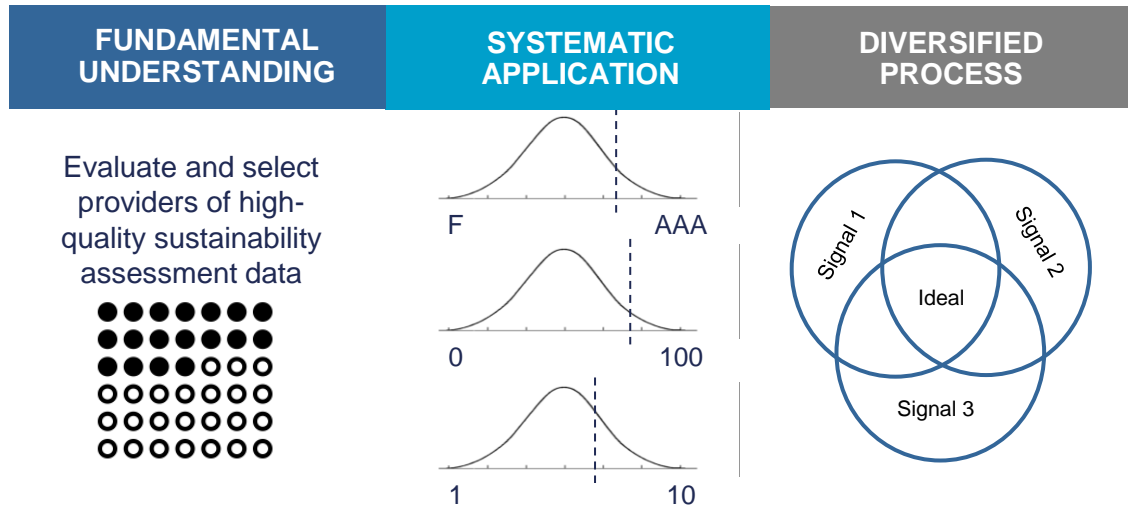
- *Identifying companies contributing to the net zero transition*
- *Assessing the climate alignment of sovereigns and commodities*

# BRIDGEWATER SYSTEMATIC SUSTAINABILITY ASSESSMENT

## Goal: SDG Alignment



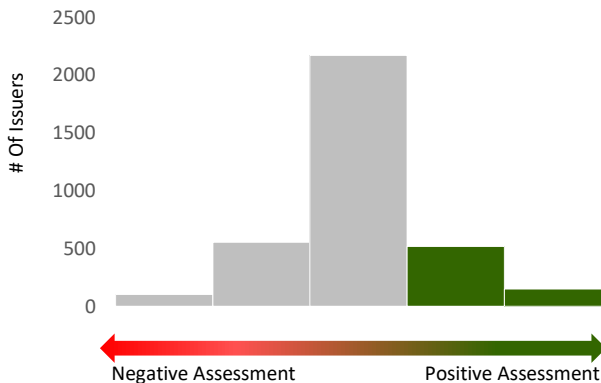
## Machine: Systematic Sustainability Process



## Outcome: Security SDG Alignment Assessments

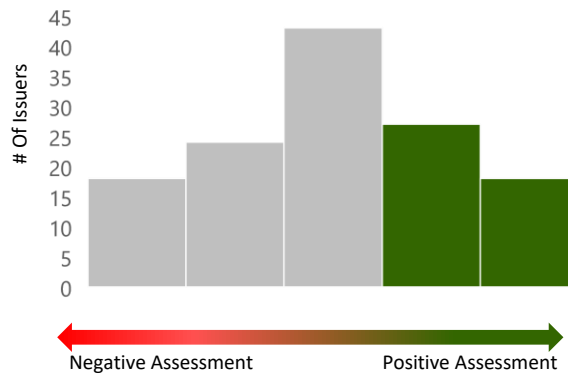
### Public Equities Assessment

Includes the top 30% of issuers



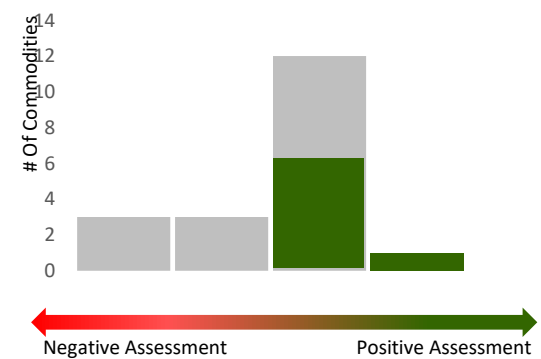
### Sovereigns Assessment

Includes the top 40% of issuers



### Commodities Assessment

Includes the top 20% of commodities

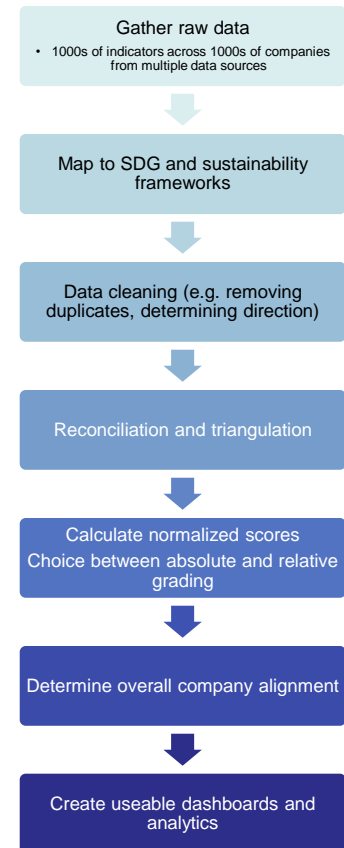


Top left data source: United Nations Development Programme. Top right diagram is illustrative and not intended to reflect actual security selection. Bottom diagrams on SDG Alignment Assessment are for illustrative purposes only. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

# CONSTRUCTING A SUSTAINABILITY DATA ECOSYSTEM

- We leverage decades of accumulated expertise to build our sustainability data ecosystem, in data diligence, data processing, data management technology, and data systemization talent.
- We currently ingest, process, clean, and actively work with more than 20 unique sustainability data sources and data providers across asset classes and themes.
- Our ecosystem currently provides us access to 250 million data points across 10,000 assets and issuers.
- Within equities, we utilize multiple different sustainability data sources to assess different dimensions of sustainability (e.g. products and services, business behavior, forward looking temperature score, etc.).
- Use data ecosystem to build fundamental systematic sustainability assessments across asset classes (e.g. equities, sovereign bonds, commodities) and sustainability themes (e.g. SDGs, Net Zero, Modern Slavery).

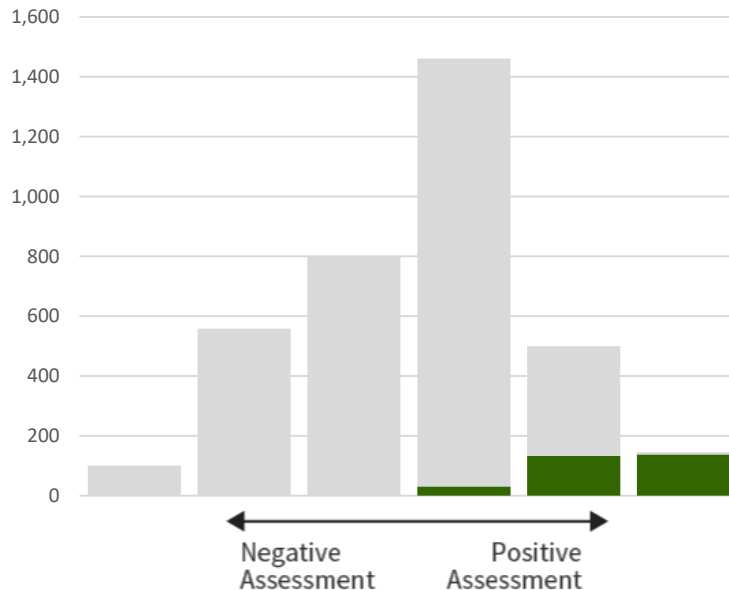
## Equity Sustainability Data Transformation



# ASSESSING THE UNIVERSE OF EQUITIES AGAINST THE SDGs

- ◆ Over \$60 trillion in market cap in public market equities assessed
- ◆ Select only the most aligned equities, roughly top quartile
- ◆ Assess companies based on (1) what the company does (sustainable products and services) and (2) how the company does it (business behavior)

Equities SDG Alignment (by Count)



Global Equities and Eligible Sustainable Equities



# FORWARD SUSTAINABILITY ALIGNMENT

- What they do: For some companies, improving means more sustainable products/services (e.g. autos)
- How they do it: For other companies, improving means better business behavior (e.g. metals / mining)

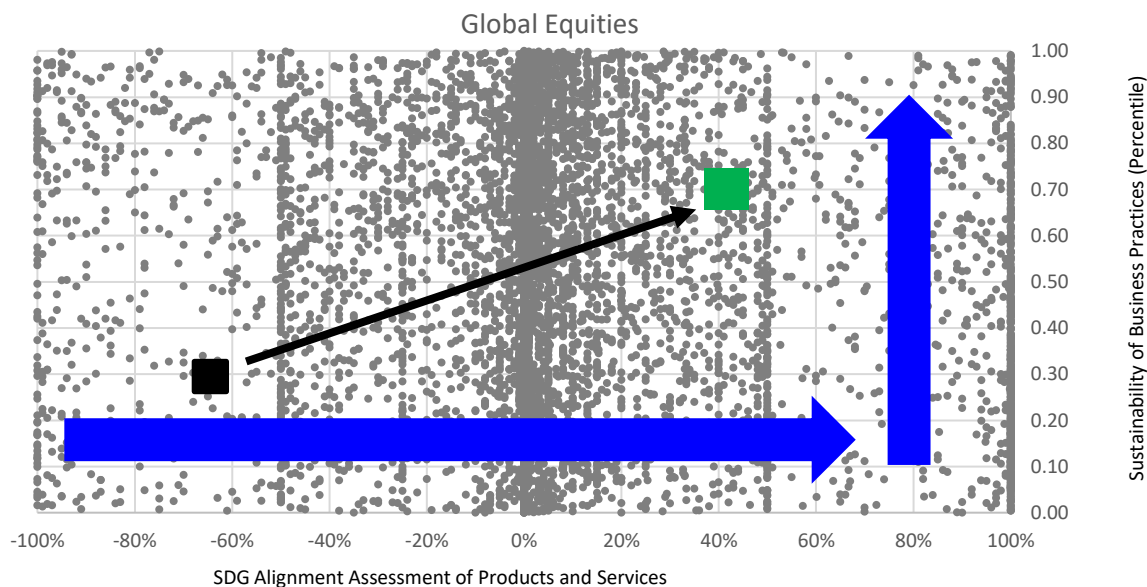
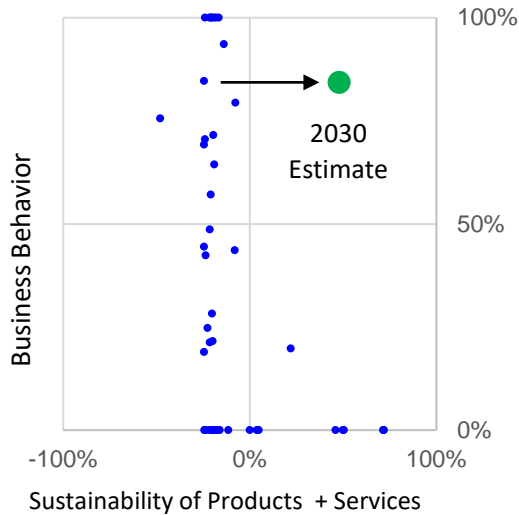


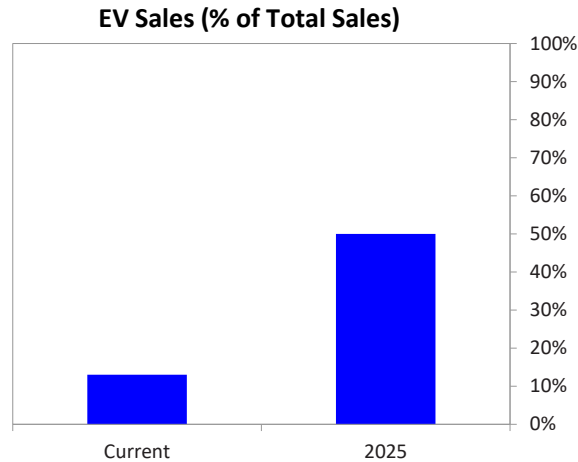
Chart is for illustrative purposes only. For an illustrative company, black dot represents illustrative sustainability assessment today, green dot represents illustrative assessment of future sustainability. Chart based on Bridgewater's proprietary sustainability selection process. Other sustainability selection methodologies could be used and could produce different results. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

# CASE STUDY: ASSESSING AUTO IMPROVERS

## SDG Alignment Forecast



## Tracking Key Improvement KPIs



## Confidence Measures

### Evidence

- Magnitude of capex commitment
- Realized shifts in products/service composition

### Intent

- Company policies and targets
- Leadership commitment and governance

### Triangulation

- Temperature score (1.5°C Pathway)
- Approved Science Based Targets

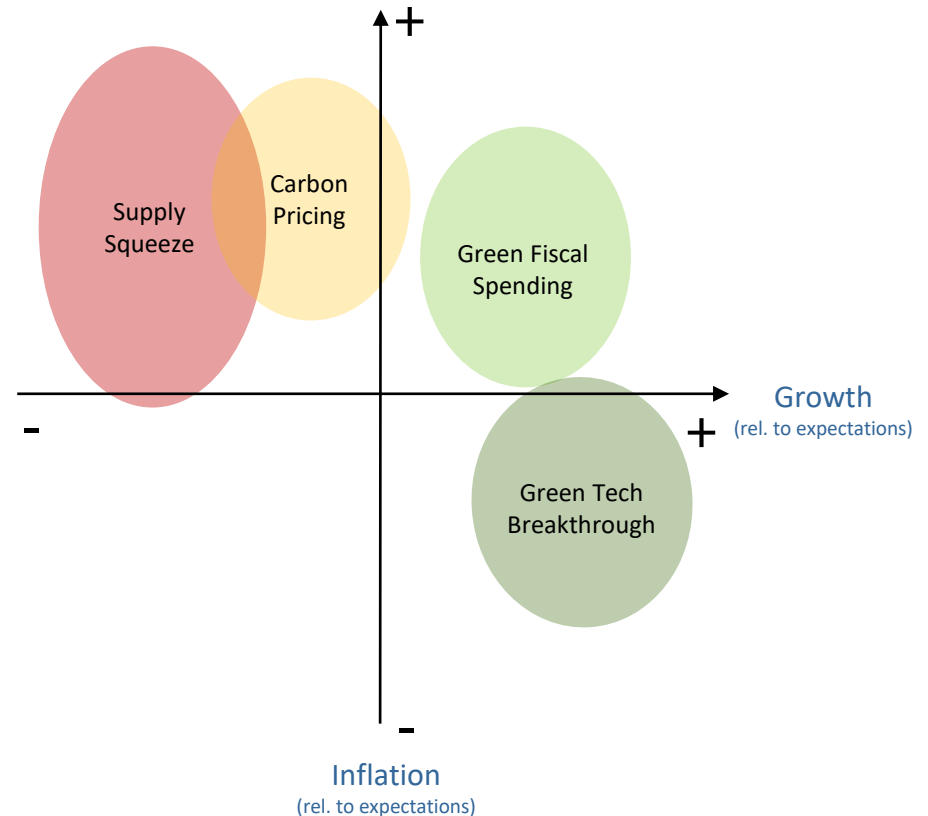
	Auto Company A
2025 Targeted EV Revenue Share (%)	50%
Current EV Revenue Share (%)	13%
Targeted Change in EV Revenue Share (%)	37%
Targeted EV Revenue Share Growth (%)	37%
Change in Green Capital Share (%)	66%
Committed Green CapEx (% of PPE, 12mma)	66%
Committed Green CapEx (USD, bn)	50
Temperature Score	1.5 C
Science Based Targets Initiative Approved Plan	Yes

Charts for illustrative purposes only. No discussion with respect to specific companies should be considered a recommendation to purchase or sell any particular investment. The companies discussed should not be taken to represent holdings in any Bridgewater strategy. It should not be assumed that any of the companies discussed were or will be profitable, or that recommendations made in the future will be profitable. Perspectives shown are based on Bridgewater analysis. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

# MAPPING DIFFERENT CLIMATE TRANSITION MECHANISMS

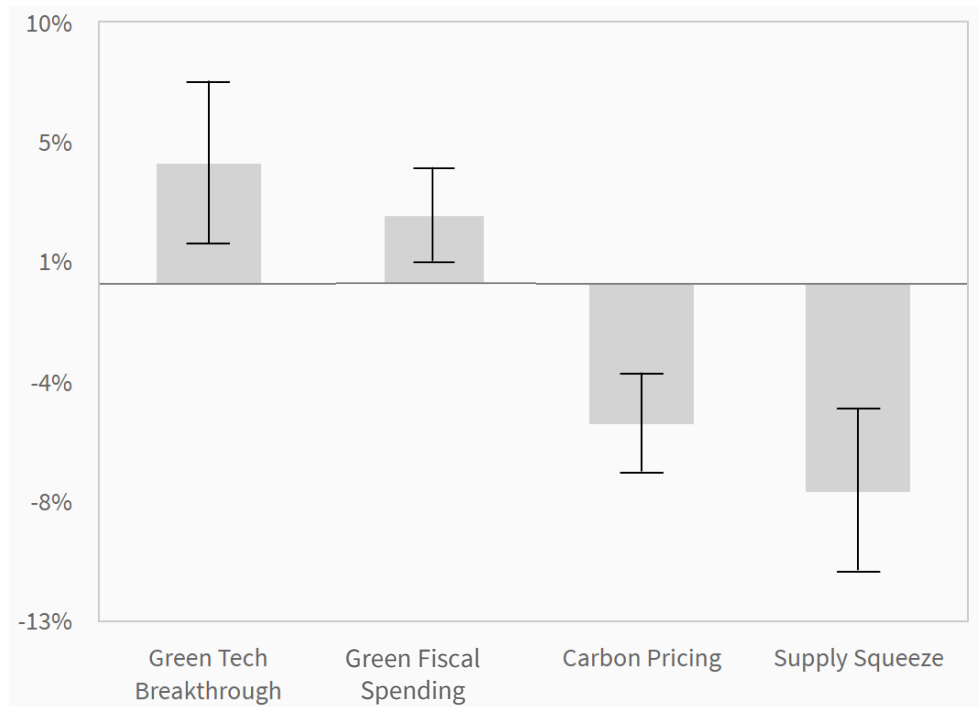
## Potential Transition Pathways

- **Green Fiscal Spending:** Large government green investment
- **Carbon Pricing:** Fast ramp up in mandatory carbon pricing
- **Tech Breakthrough:** Step change in carbon capture, renewable power
- **Supply Squeeze:** austere policy drives energy shortages and economic recessions



# CLIMATE STRESS TESTING: IMPLICATIONS ON PORTFOLIOS

Illustrative Global Portfolio:  
Estimated Climate Transition Return Impact  
Expected Excess Return



Estimated transition scenario impacts on the Illustrative Global Portfolio are based on Bridgewater analysis and are not guaranteed. For more on the Illustrative Global Portfolio, please see "Illustrative Portfolio" disclosures located at the end of the presentation. Please review the "Important Disclosures and Other Information" located at the end of this presentation.

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Asset Type	Asset	Nominal Exposure	% Hedged Fx	Beta Volatility (ex-Currency)	Beta Ratio (ex-Currency)	Alpha Volatility	Alpha Ratio
Equities	World Equities	58.3%	0.0%	15.7%	0.31	5.0%	0.30
Nominal Government Bonds	Developed World Bonds	11.2%	0.0%	4.6%	0.31	2.0%	0.30
Real Estate	Developed World Real Estate	7.1%	0.0%	19.2%	0.31	6.0%	0.30
MBS	United States MBS	6.1%	0.0%	4.8%	0.25	-	-
Corporate Bonds	World Corporate Bonds	5.1%	0.0%	6.9%	0.34	3.0%	0.30
Absolute Return	Absolute Return	5.1%	0.0%	-	-	7.0%	0.50
Equities	Emerging Market Equities	3.1%	0.0%	21.5%	0.25	5.0%	0.30
High Yield Bonds	United States High Yield Bonds	2.0%	0.0%	12.1%	0.30	-	-
IL Bonds	Developed World IL Bonds	2.0%	0.0%	6.0%	0.30	1.0%	0.30