

# Linking Stakeholder Engagement to Capital Planning and Decision Making

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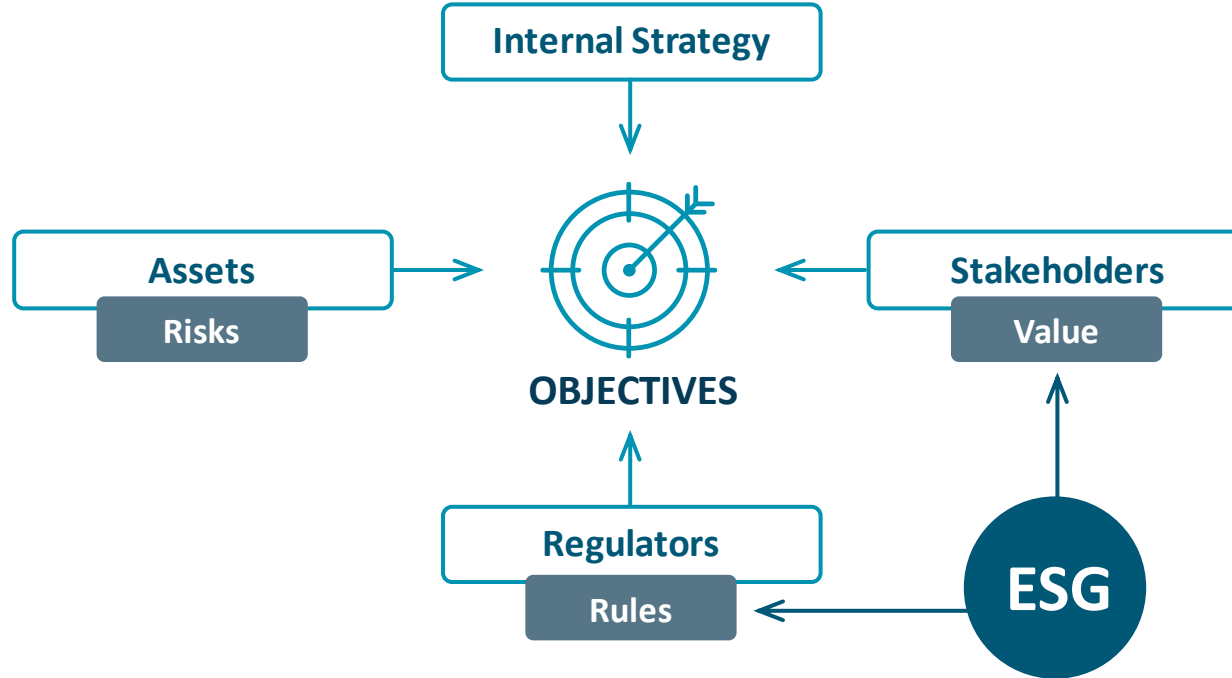


# Agenda



- Stakeholder Engagement and ESG
- ESG Disclosures & Reporting
- From Good Intentions to Action
- Asset Management and ESG
  - Value Frameworks
  - Asset Investment Planning
  - Optimization
- Summary & Questions

# Objectives in Asset Intensive Organizations



# Stakeholder Engagement and ESG



ENVIRONMENTAL	SOCIAL	GOVERNANCE
How an organization acts towards the planet	How an organization treats its employees, customers, suppliers and local communities	How an organization is run, including audits and shareholder rights
Pollution	Employee Relations	Bribery & Corruption
Resource Depletion	Diversity	Tax Policy
Climate Change	Health & Safety	Risk Management
Water and Waste Management	Community Development	Executive Pay
Land Use	Work Conditions	Board Independence

ESG includes matters that have potentially **material** strategic and financial impacts





# SASB Reporting Framework

## For Water Utilities & Services



TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	IF-WU-130a.1
Distribution Network Efficiency	Water main replacement rate <sup>2</sup>	Quantitative	Rate	IF-WU-140a.1
	Volume of non-revenue real water losses	Quantitative	Thousand cubic meters (m <sup>3</sup> )	IF-WU-140a.2
Effluent Quality Management	Number of incidents of non-compliance associated with water effluent quality permits, standards, and regulations	Quantitative	Number	IF-WU-140b.1
	Discussion of strategies to manage effluents of emerging concern	Discussion and Analysis	n/a	IF-WU-140b.2
Water Affordability & Access	Average retail water rate for (1) residential, (2) commercial, and (3) industrial customers	Quantitative	Rate	IF-WU-240a.1
	Typical monthly water bill for residential customers for 10 Ccf of water delivered per month	Quantitative	Reporting currency	IF-WU-240a.2
	Number of residential customer water disconnections for non-payment, percentage reconnected within 30 days <sup>3</sup>	Quantitative	Number, Percentage (%)	IF-WU-240a.3
	Discussion of impact of external factors on customer affordability of water, including the economic conditions of the service territory	Discussion and Analysis	n/a	IF-WU-240a.4
Drinking Water Quality	Number of (1) acute health-based, (2) non-acute health-based, and (3) non-health-based drinking water violations <sup>4</sup>	Quantitative	Number	IF-WU-250a.1
	Discussion of strategies to manage drinking water contaminants of emerging concern	Discussion and Analysis	n/a	IF-WU-250a.2

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
End-Use Efficiency	Percentage of water utility revenues from rate structures that are designed to promote conservation and revenue resilience	Quantitative	Percentage (%)	IF-WU-420a.1
	Customer water savings from efficiency measures, by market <sup>5</sup>	Quantitative	Cubic meters (m <sup>3</sup> )	IF-WU-420a.2
Water Supply Resilience	Total water sourced from regions with High or Extremely High Baseline Water Stress, percentage purchased from a third party	Quantitative	Thousand cubic meters (m <sup>3</sup> ), Percentage (%)	IF-WU-440a.1
	Volume of recycled water delivered to customers	Quantitative	Thousand cubic meters (m <sup>3</sup> )	IF-WU-440a.2
	Discussion of strategies to manage risks associated with the quality and availability of water resources	Discussion and Analysis	n/a	IF-WU-440a.3
Network Resiliency & Impacts of Climate Change	Wastewater treatment capacity located in 100-year flood zones	Quantitative	Cubic meters (m <sup>3</sup> ) per day	IF-WU-450a.1
	(1) Number and (2) volume of sanitary sewer overflows (SSO), (3) percentage of volume recovered	Quantitative	Number, Cubic meters (m <sup>3</sup> ), Percentage (%)	IF-WU-450a.2
	(1) Number of unplanned service disruptions, and (2) customers affected, each by duration category <sup>5</sup>	Quantitative	Number	IF-WU-450a.3
	Description of efforts to identify and manage risks and opportunities related to the impact of climate change on distribution and wastewater infrastructure	Discussion and Analysis	n/a	IF-WU-450a.4

Source: Water Utilities & Services Sustainability Accounting Standard, Version 2018-10, SASB



# The Journey

## FINANCIAL ACCOUNTS

- Typical current financial reporting

## VALUE CREATION

- Sustainability metrics on topics material for enterprise value creation

## IMPACT DRIVEN

- Reflect the organization's significant impacts on the economy, environment & people



# Decision Making Beyond Financial Forecasts

AMP7 - I016006 PR19 WINEP ST Volume\_ATTLEBOROUGH WRC

## DM0 Install storm volume to permitted DWF

AMP7 Water Recycling Centres

None

Version 3

Estimate is Not Editable

Approved by Reviewer · 1 year ago by system

Unlock Cost Estimate

Costs

Info

Assets (7) Loadings Adjustments (7) Spend Profiles

+ New Asset Clone Delete

Visible Columns

	Asset Name	Asset Type Code	Qty	Capital Cost (£)	Capital Carbon (T CO2E)	Capital Water (m3)	Adjustments
✓	Footpath	10002	1	2,962.50	1.03	1.04	
✓	Rigid Pipework <#2>	1401	1	13,259.48	0.43	0.09	From storm tank to pumping
✓	Rigid Pipework	1401	1	14,570.38	0.54	0.11	from storm tank to storm di
✓	Storm Tanks, Circular - Civil	2C-STH-02	1	245,699.39	42.52	38.93	
✓	Storm Tanks, Circular M&E	2C-STH-03	1	134,619.73	28.37	3.39	
✓	Telemetry Outstation	6401	1	8,331.04	0.01	0.00	
✓	Landscaping	SS-SBS-08	1	44,596.90	0.72	2.70	

### Summary Costs

Capital Cost		£630,646.09
Operating & Maintenance Cost (RICS)		£11,923.55
Capital Carbon	T CO2E	73.61
Capital Water	m3	46.26
PR09 Carbon	T CO2E	228.73
Operational Carbon	kWh/yr	436,797.00
Operational Carbon	TCO2e	0.13



# ESG: From Lagging to Leading Indicators





# From Good Intentions to Action

Climate Action 100+

NEWS ABOUT CLIMATE ACTION 100+ CONTACT SIGNATORIES' LOGIN

THE BUSINESS CASE APPROACH WHO'S INVOLVED PROGRESS JOIN

- Net-zero GHG emissions by 2050 (or sooner) ambition
- Long-term (2036-2050) GHG reduction target(s)
- Medium-term (2026-2035) GHG reduction target(s)
- Short-term (up to 2025) GHG reduction target(s)
- Decarbonisation strategy
- Capital allocation alignment**
- Climate policy engagement
- Climate Governance
- Just Transition
- TCFD Disclosure

NOTES

\*In the absence of a credible 1.5°C scenario, companies have been measured against a best-available below 2°C scenario. Company assessments will be adjusted when a credible 1.5°C scenario becomes available.

SCOPE 3 APPLICATION

APPLICATION

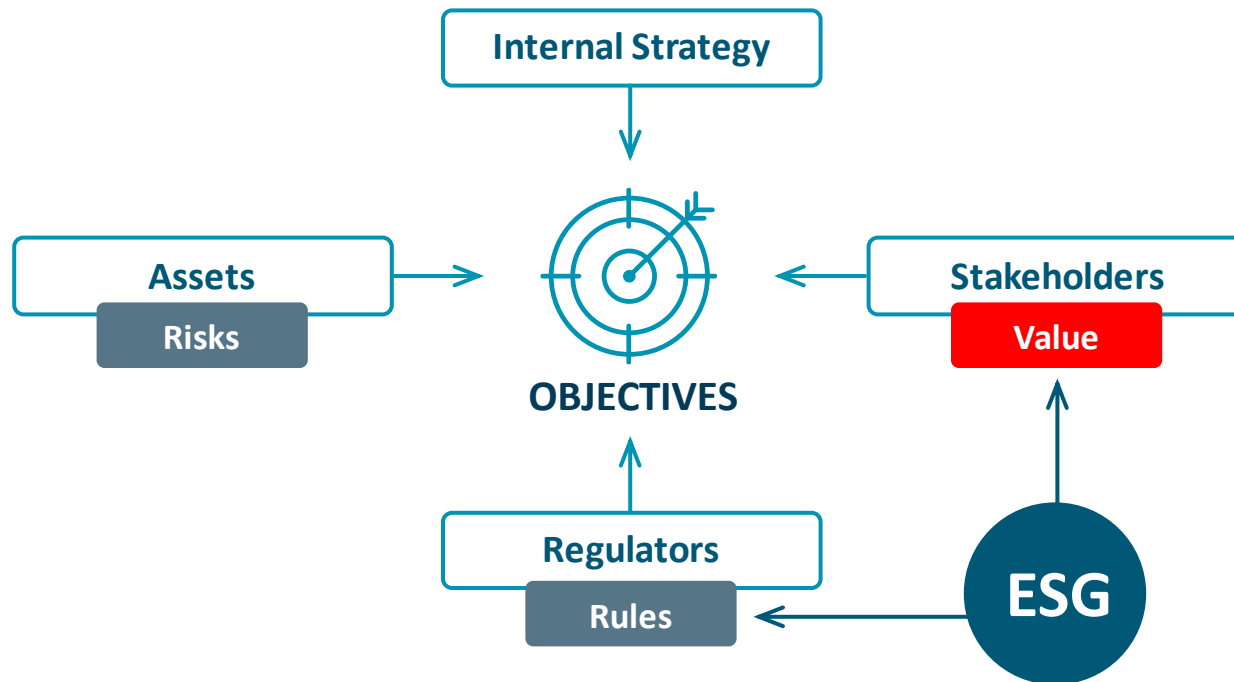
Yes (use of sold product from oil and gas distribution businesses - Category 11 of the GHG protocol)

Applicability of scope 3 emissions (indirect emissions that are produced in a company's value chain) as assessed by the Benchmark varies by sector. [See the detailed sector application of scope 3 emissions in the Benchmark Framework](#). Relevance of scope 3 emissions affects the assessment of the following disclosure metrics: 11b, 2.2b, 3.2b, 4.2b, 5.1a, and 5.1b.

DOWNLOAD THE ASSESSMENTS



# Objectives in Asset Intensive Organizations

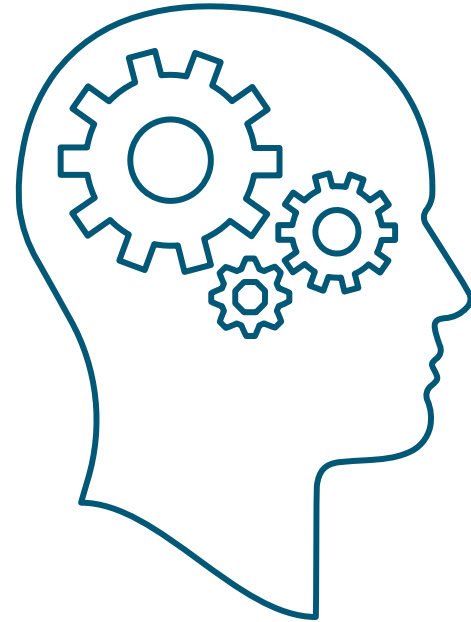


# Value-based Decision Making

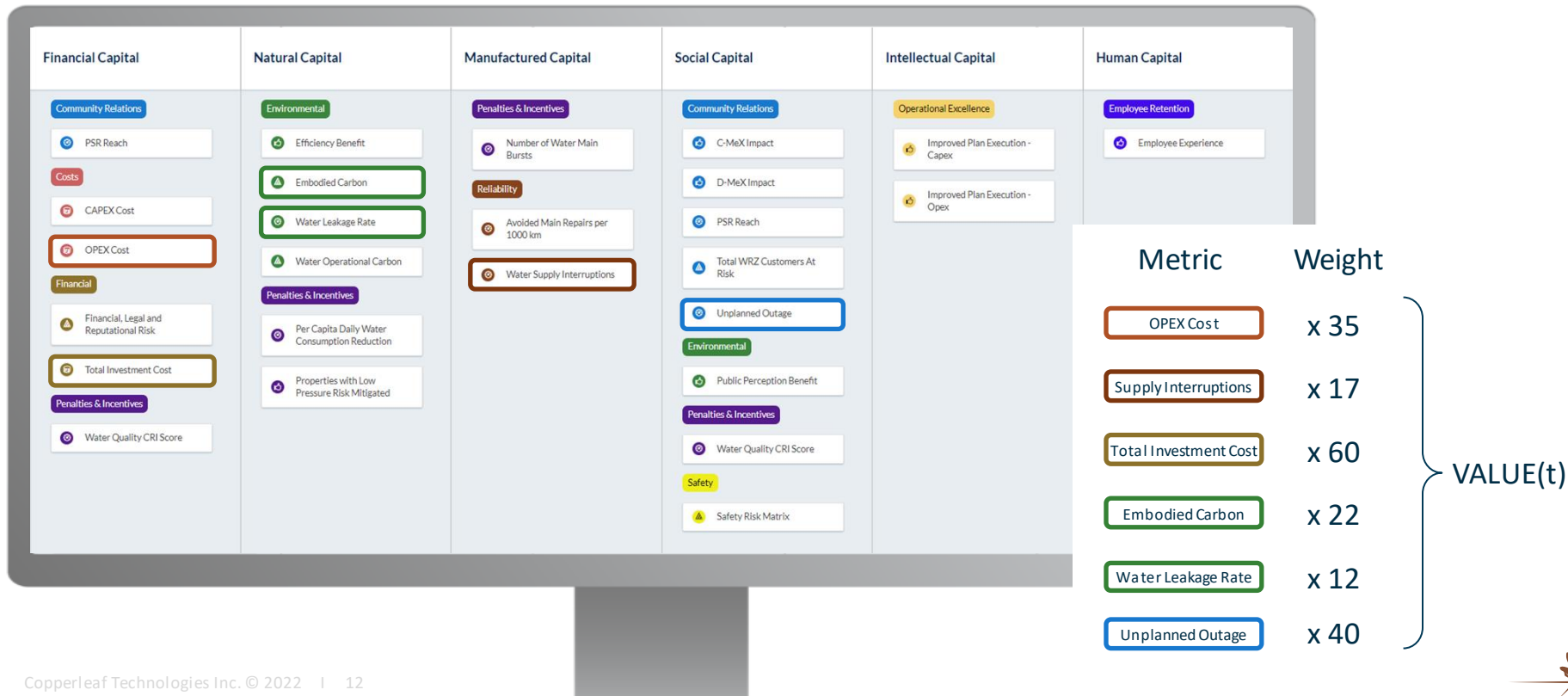
THE KEY IS



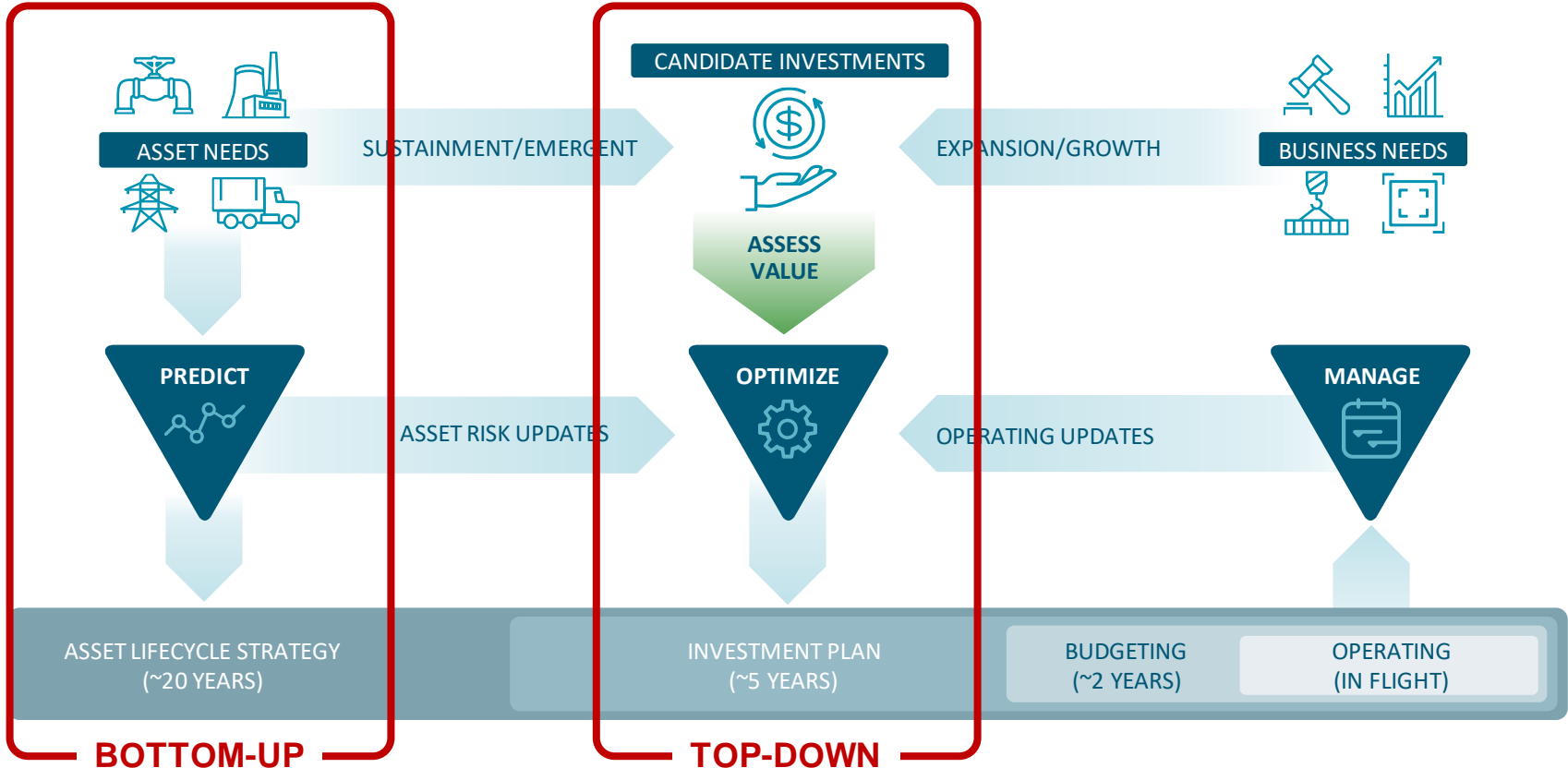
Value



# Value Frameworks



# Integrated Investment Strategies



# Optimize to Meet Constraints and Targets

 FINANCIAL

 TOTAL RISK

 RESOURCES

 OUTAGE CONSTRAINTS

 WATER CONSERVATION

 ASSET REPLACEMENT TARGETS

 ALL





# Optimize to Meet Constraints and Targets

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 TOTAL RISK

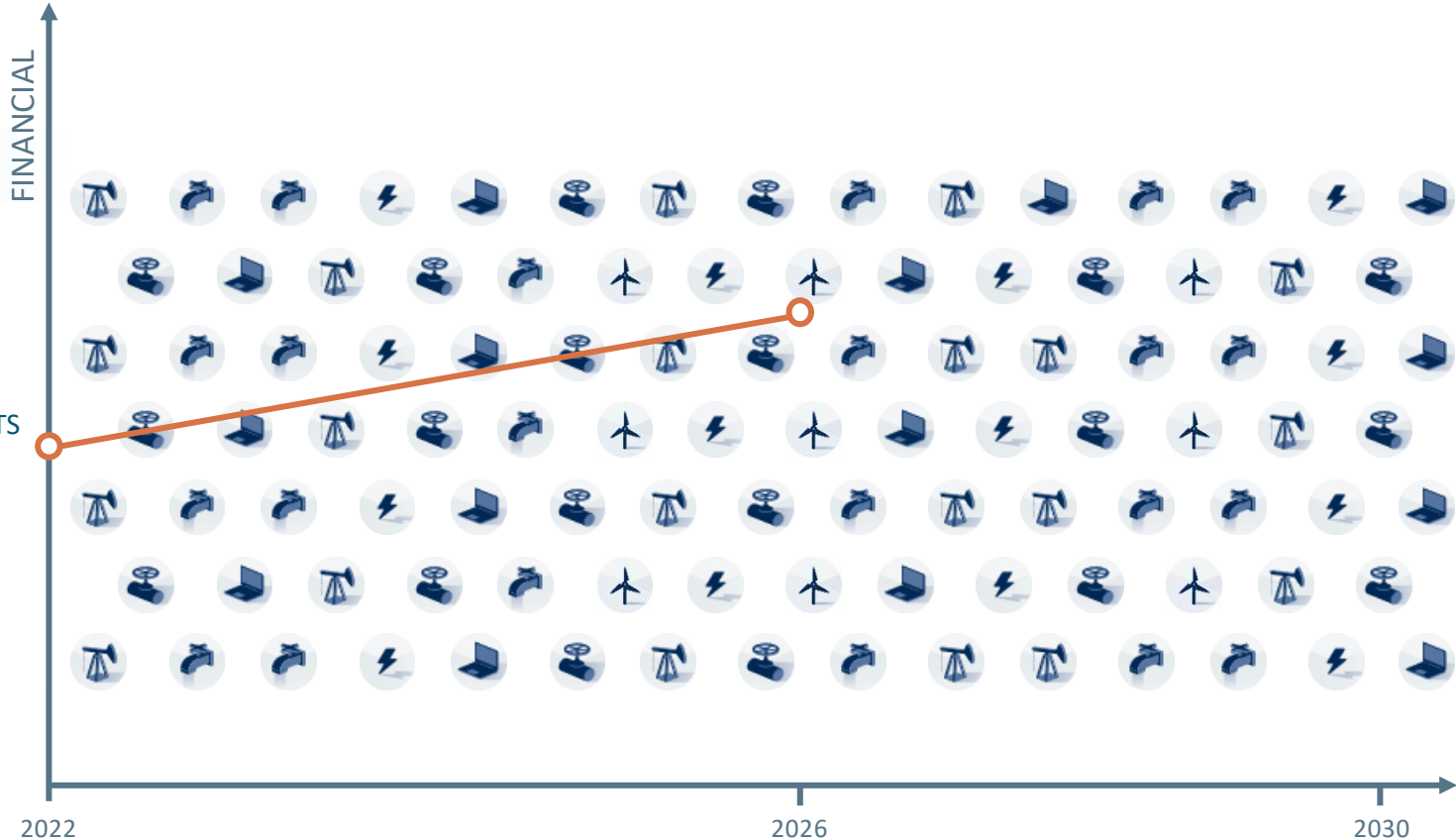
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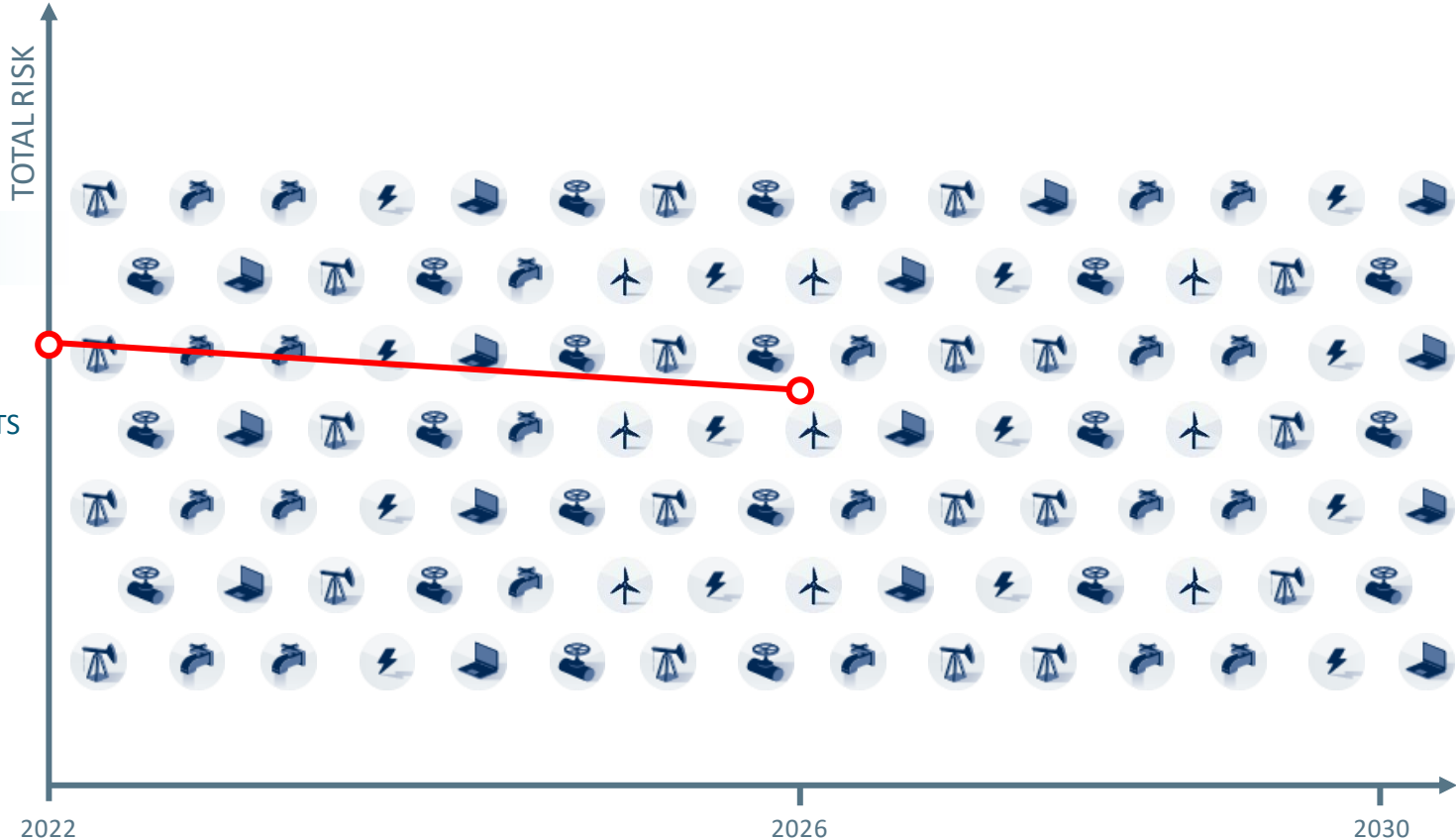
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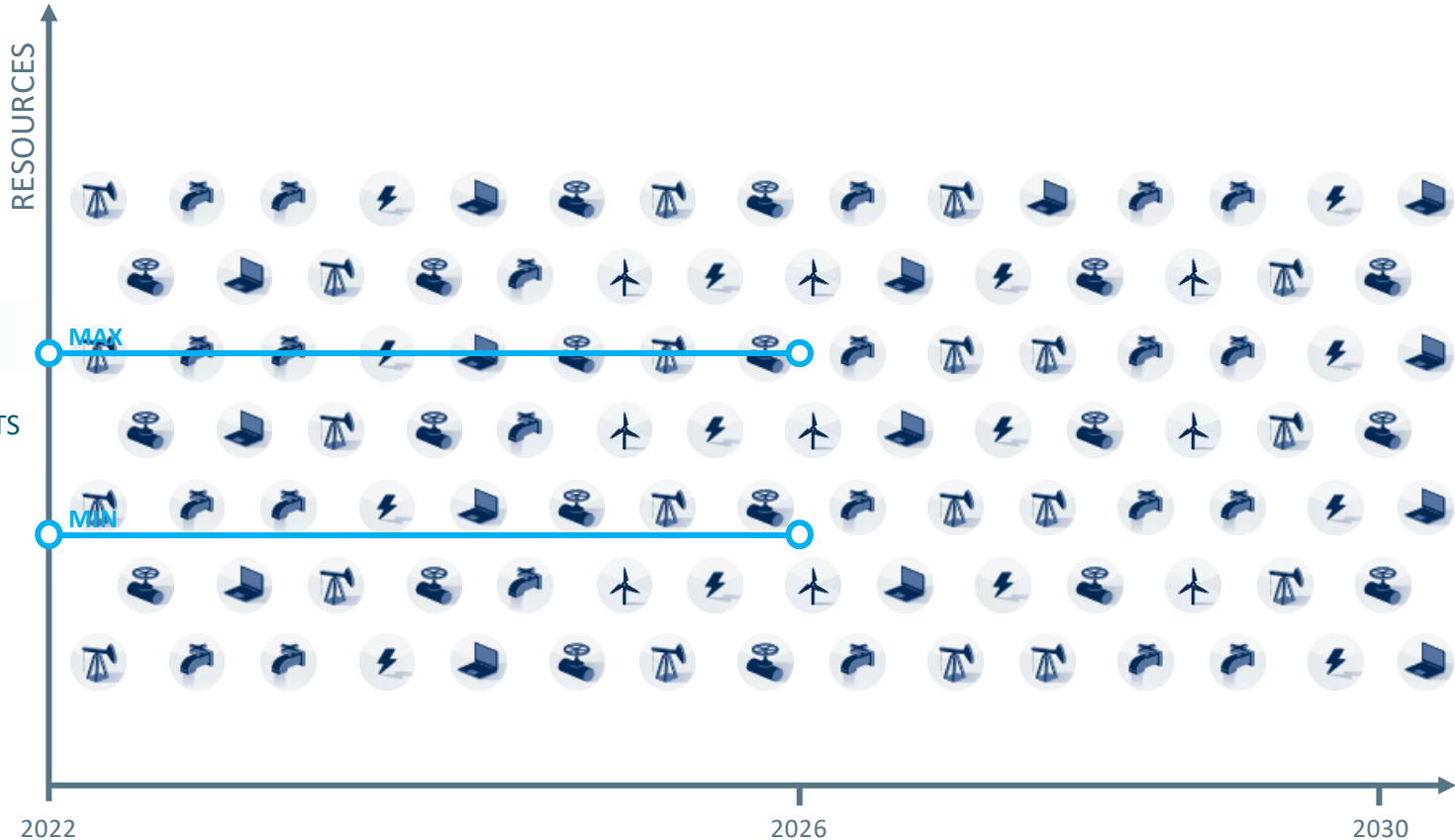
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 OUTAGE CONSTRAINTS

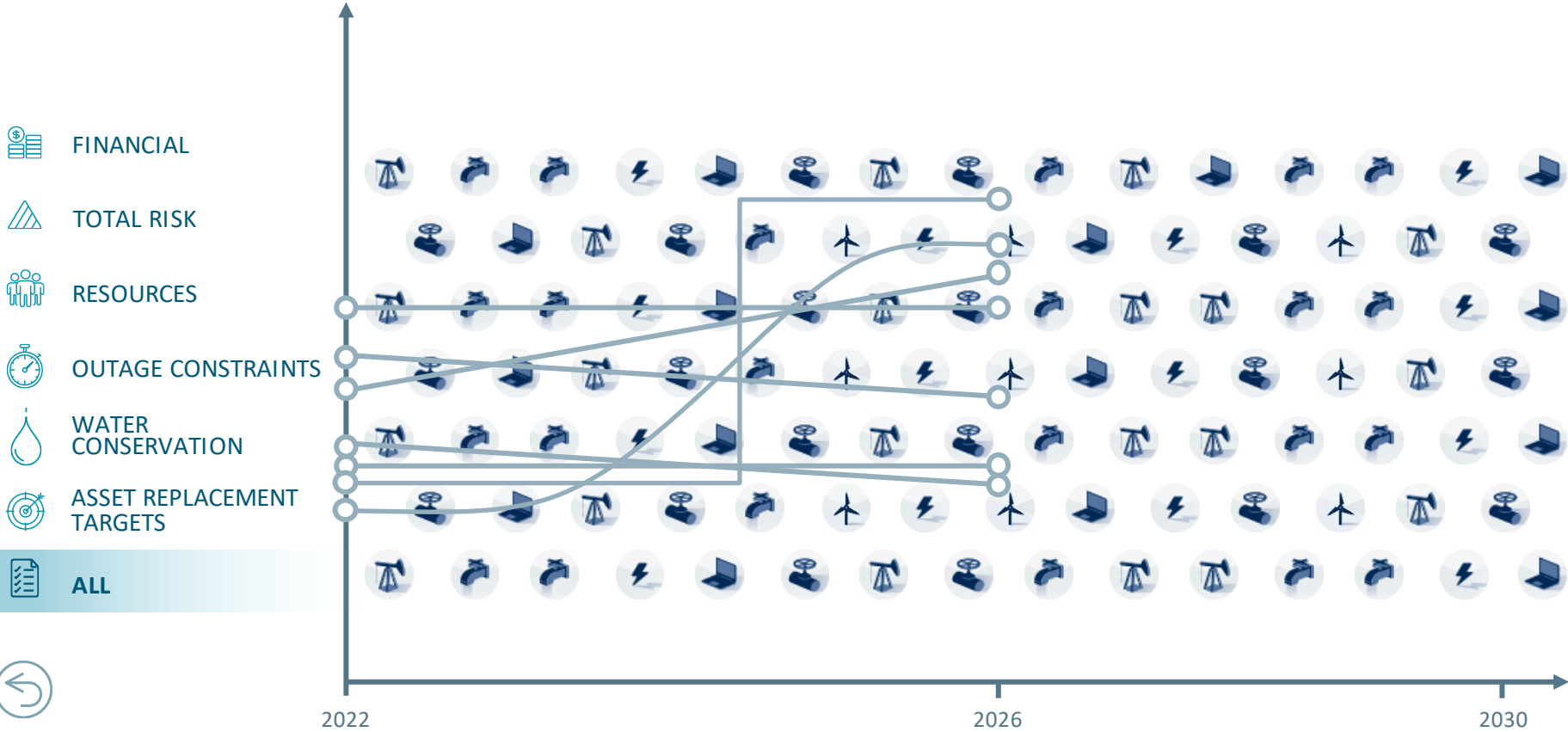
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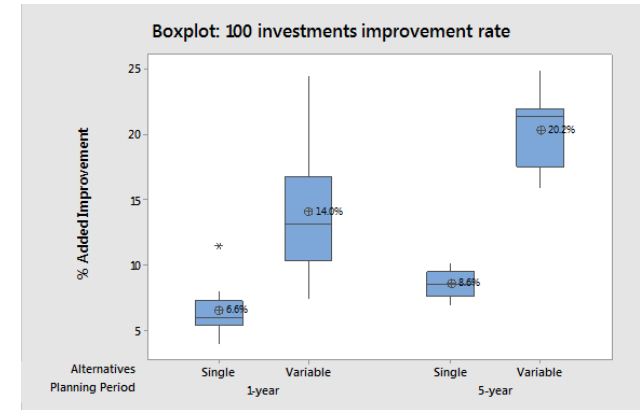
# Optimize to Meet Constraints and Targets



# Optimization vs. Prioritization

- Apply multi-criteria decision analysis techniques to select optimal portfolios
- Maximize value
- Honour all constraints
  - Financial
  - Operational
  - Risk
  - Etc.

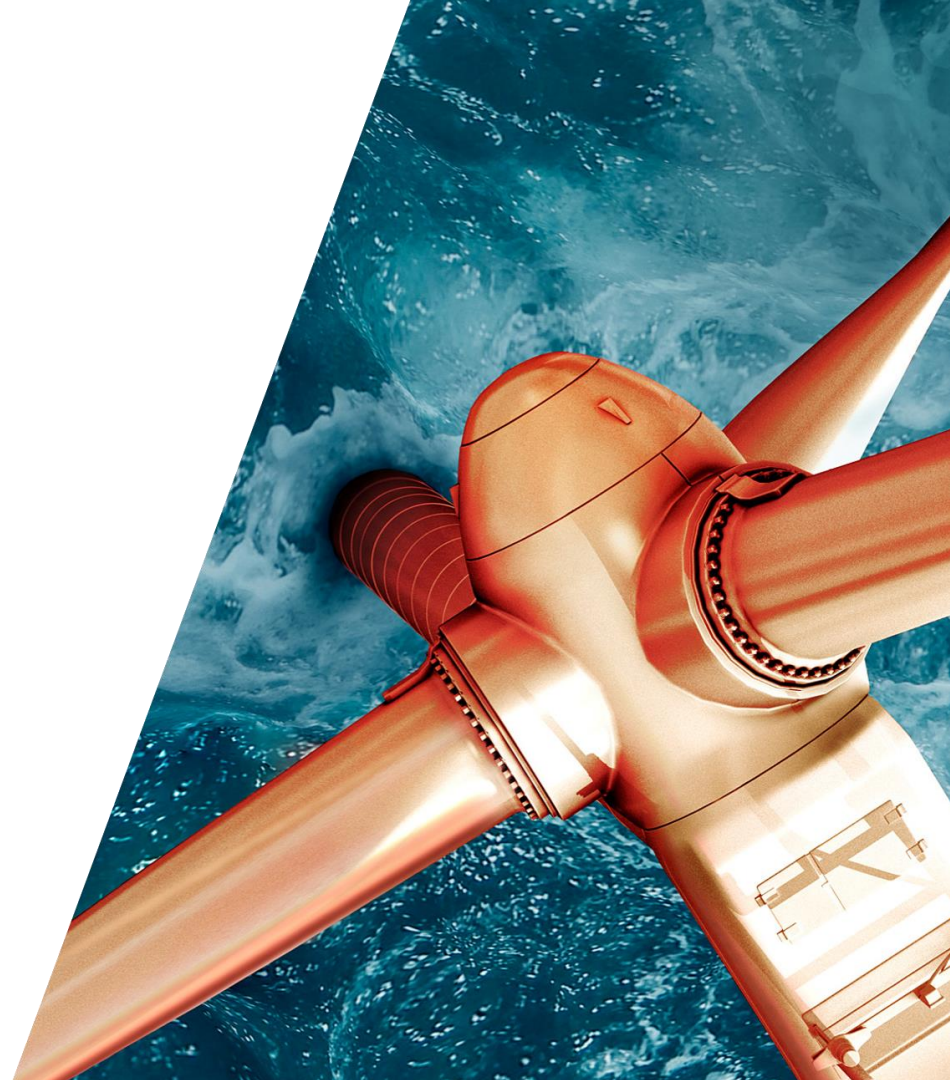
Portfolio size = 1000 investments	Single alternative investments	Variable alternative investments
1-year planning period	6.6%	13.3%
5-year planning period	10.3%	20.3%



# Summary

## Stakeholder Engagement in Capital Planning

- Asset intensive organizations operate in complex stakeholder environments
  - ESG can be a good proxy for such environments
  - Maximizing value for stakeholders is key
  - Regulatory pressure is growing
- Align decision making to ESG objectives
  - Incorporate ESG targets in long-term planning
  - Use a Value Framework for decision making
  - Strong governance & transparency are key
- Optimal plans mitigate asset risk *and* achieve ESG goals
  - AI-enabled optimization
  - Robust scenario capabilities
  - Track and report on ESG targets







**Thank You!**

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