



Climate Roadmap:

Harnessing Returns from the Energy Transition

Accelerating Decarbonization

Harnessing Returns from the Energy Transition



Our Plan:

- I. INVEST.** \$1 billion invested in Energy Transition Solutions over the next 5 years.
- II. ACT.** Expand our Proxy Voting Power.
- III. ENGAGE.** Enhance our Direct Company Engagement Efforts.

Our Mission is our North Star



The primary mission of the SBI is to provide retirement security for over 840,000 Minnesota public employees and their families.

We are entrusted with this mission on behalf of plan members who contribute a meaningful portion of their salaries in return for their retirement security.

The Minnesota public employees we serve include bus drivers, snowplow drivers, teachers, firefighters, civil servants, and public safety officers, among many others.

139 years <i>in operation</i>	Established in 1885 by Article XI of the Minnesota Constitution		
Plan Members 840,939	PERA, MSRS, TRA <i>Members</i>		
\$134 B <i>Total Assets</i>	\$86 B <i>Combined Funds</i>		
Exceptional Performance	CY '23	14.6%	
	FY '23	8.9%	

	3 Yr	5 Yr	10 Yr	20 Yr	30 Yr
Combined Funds	9.9%	8.2%	8.8%	8.5%	8.4%
Combined Funds - Composite Index	9.5%	8.0%	8.6%	8.3%	8.2%
All Returns Net of Investment Fees - As of 6-30-2023					

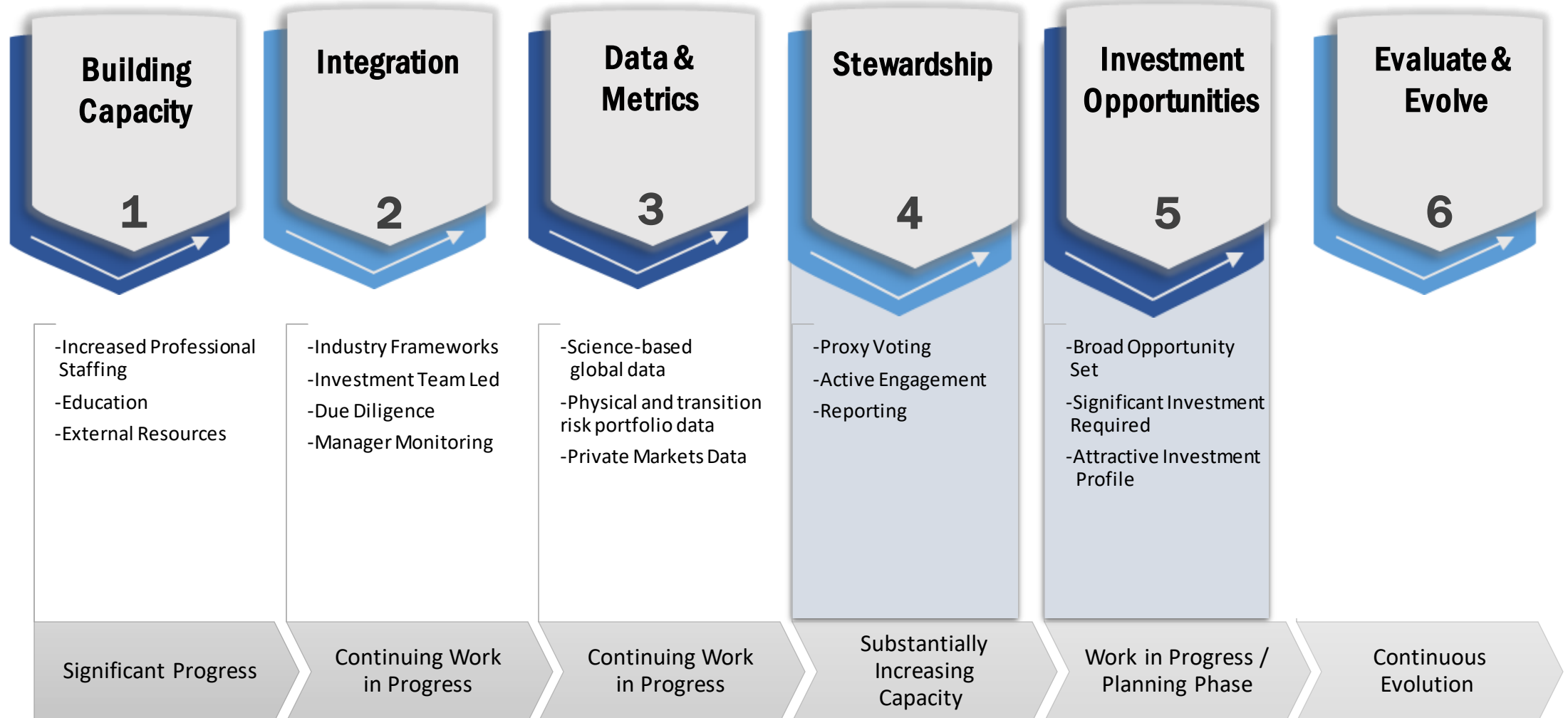
Our Fiduciary Duty



We are clear about what that means.

- I. Achieve an appropriate risk adjusted rate of return for the exclusive benefit of the Plan Members.**
- II. Consider all material risks and opportunities.**
- III. Climate Change and the Energy Transition present material risks and opportunities that must be considered.**

The SBI Climate Roadmap:






Data & Metrics



Consistent, reliable, and comparable information disclosures are critical for investment decision-making.



Board Members:
Governor Tim Walz, Chair
State Auditor Julie Blaha
Secretary of State Steve Simon
Attorney General Keith Ellison

Executive Director & Chief Investment Officer:
Mansco Perry III

Minnesota State Board of Investment
60 Empire Drive, Suite 355
St. Paul, MN 55103
Phone: (651) 296-3328
Fax: (651) 296-9572
Email: minn.sbi@state.mn.us
Website: <https://mn.gov/sbi/>
An Equal Opportunity Employer



Via Email
June 15, 2022
Vanessa A. Countryman
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Proposed Rules for The Enhancement and Standardization of Climate-Related Disclosures for Investors, File No. S7-10-22

Dear Madam Secretary:

The Minnesota State Board of Investment (MSBI) writes to submit the following comment on the SEC's proposed rules for climate-related disclosures. The MSBI broadly supports the proposed rules and believes that their implementation will be beneficial for investors. The focus of the proposed rules is on climate-related physical risks, which are particularly relevant to the MSBI's investment portfolio. The detailed comments submitted by the MSBI are attached for your review.

As background, the MSBI is the state's largest pension plan, managing assets on behalf of state pension plans. The primary focus of the MSBI's investments is in public and private equity, debt, and programs, which are governed by the Minnesota Statutes, Chapter 63A.

As part of its fiduciary duty, the MSBI is committed to ensuring that its investments are aligned with its long-term goals. The MSBI believes that the proposed rules will help to ensure that investors have the information they need to make informed decisions about their investments. The MSBI is committed to working with the SEC to ensure that the proposed rules are implemented in a way that is consistent with the MSBI's investment objectives.

¹ See Letter from Jeff Mahoney, Secretary, U.S. Securities and Exchange Commission, <https://www.cii.org/Files/Comments/2020Disclosures%20for%20SEI.pdf>
² Meketa Investment Group, <https://msbi.us/sites/default/files/2022-06/MSBI%20Comment%20on%20SEC%20Proposed%20Rules%20for%20Climate-Related%20Disclosures.pdf>

IN THE UNITED STATES COURT OF APPEALS [April 2024]
FOR THE EIGHTH CIRCUIT

STATE OF IOWA, *ET AL.*,
PETITIONERS,

V.

SECURITIES AND EXCHANGE COMMISSION,
RESPONDENT.

ON PETITION FOR REVIEW OF AN ORDER AND RULE OF THE
SECURITIES AND EXCHANGE COMMISSION

DECLARATION OF THE EXECUTIVE DIRECTOR AND CHIEF INVESTMENT
OFFICER OF THE MINNESOTA STATE BOARD OF INVESTMENT

Voting proxies is an important part of being an active and engaged owner.



* Approximately 100 related to the environment.

In FY23, the SBI voted the proxies for its approximately \$32 billion U.S. stock portfolio.

Our ownership interest enables us to engage to drive outcomes.

The SBI has had successful engagements with Hess and Marathon Oil on the topics of flaring and methane emissions. These engagements included:

- Filing shareholder proposals
- Meeting with management
- Company commitments
- Withdrawing shareholder proposals

The SBI recently commenced an engagement with a foreign energy company through our ownership of the company's debt.

We intend to enhance our engagement efforts with additional resources that will allow us to work directly with more companies.





Investment Opportunities: Tailwinds



- U.S. Industrial Policy – CHIPS Act, Infrastructure Act, and the Inflation Reduction Act
- Worldwide Governmental Regulatory Support
- Significant Corporate Target Setting and Climate Focus
- ‘Brown to Green’ Focus within the Conventional Energy Industry
- Renewable Energy Projects – Job Growth
- Solar and Wind – Scale and Cost Competitive
- Battery and Other Enabling Technologies Continue to Improve

MPRnews

Politics and Government

State lawmakers agree to 'historic' environment and climate bill

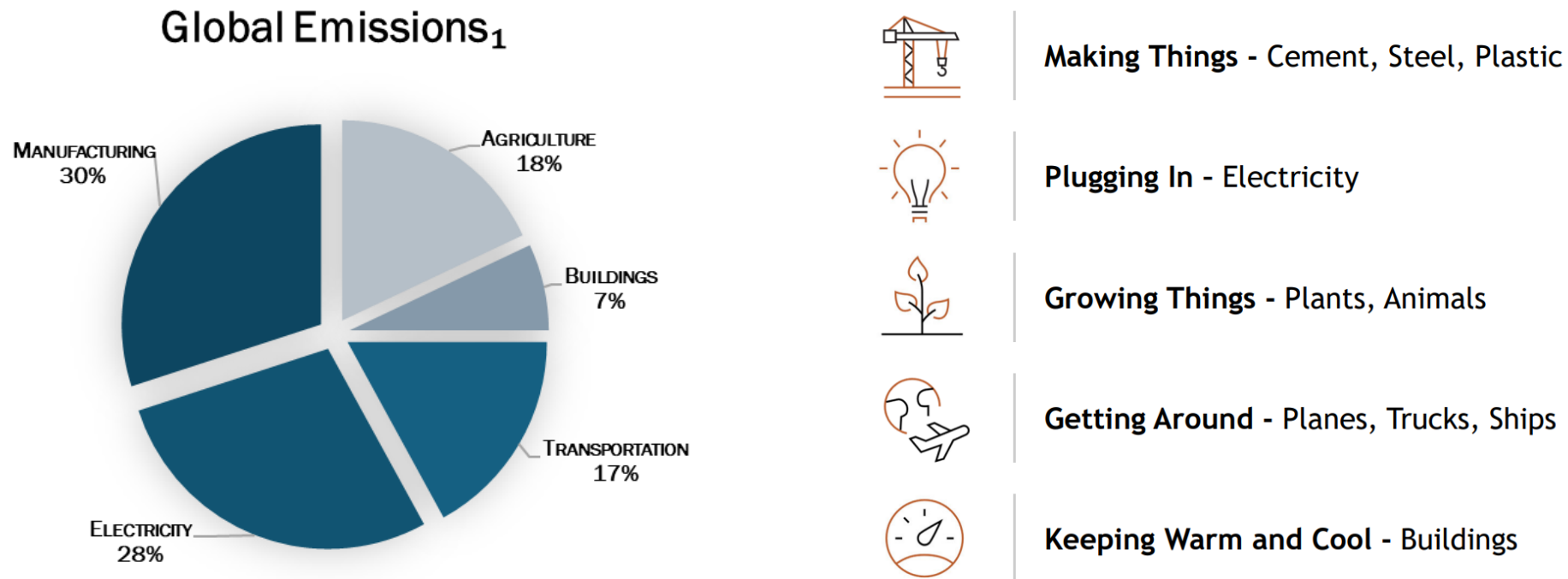


Office of
**Governor Tim Walz &
Lt. Governor Peggy Flanagan**

**Top climate initiatives passed in 2023 include:
100% Carbon-free Electricity by 2040**

“... Minnesota is investing in innovative strategies that combat the effects of climate change... with these historic investments, we are positioning our state as a national leader in climate solutions, ensuring Minnesota remains a great place to live, work, and raise a family for generations to come.”
Governor Walz.

Aggressive net-zero targets have been set globally, covering nearly 90% of all emissions₂





U.S. Electric Grid Isn't Ready for the Energy Transition

Significant Investment is Required



The New York Times

Electric Grids Are a Hidden Weak Spot in World's Climate Plans, Report Warns

Even as technologies like wind, solar and electric cars spread, nations are falling far behind in building the power lines needed to support them.

THE WALL STREET JOURNAL.

The Coming Electricity Crisis

Artificial-intelligence data centers and climate rules are pushing the power grid to what could become a breaking point.

Bloomberg

AI Will Suck Up 500% More Power in UK in 10 Years, Grid CEO Says

- Fast-developing technologies require increased data-center use
- Grid upgrade is one option for the future, John Pettigrew says

FINANCIAL TIMES

Soaring power demand from AI and crypto pose threat to grid

70% of the required investment is likely to go into the electricity sector.



Breaking Down the Cost of the Clean Energy Transition (visualcapitalist.com)



Investment Opportunities:

A broad opportunity set... same rigorous standards



There are sufficient, attractive Energy Transition Solution opportunities for the SBI to potentially commit up to \$100-200M annually.

Category	Examples
Clean Power Generation	Renewable power supply chain, storage, raw material inputs for batteries, and transportation
Grid Modernization	Transmission, critical infrastructure, charging, resilience
Brown to Green	Sensor technologies, carbon capture and sequestration, net zero scope 1 & 2 oil & gas
Lower Carbon Intensity	Natural gas, hydrogen, blended and bio-fuels, greener steel/cement
Resource Efficiency	Agriculture, water, recycling, energy efficiency

These investments will be undertaken:

- using the same rigorous standards that apply to all our investments
- with trusted partners under attractive terms
- within the capital constraints of the pacing model
- to achieve attractive risk adjusted returns that contribute to a diversified portfolio



Investment Opportunities

Example: The Champlain Hudson Power Express



Powering the City That Never Sleeps with Clean Energy

Transmission Developers is the developer of the project to bring clean, renewable hydro and wind power to New York City from via 339 miles of underground pipeline.

- Buried line ensures reliable power delivery even in extreme weather and greatly reduces environmental and community impacts.
- Displaces fossil fuel generation with an equally reliable power supply.
- Will supply enough power for more than 1 million New York homes.
- Carbon reduction of 3.9M tons in first full year of operation.
- Permitted and expected to be fully operational in Spring of 2026.
- Creates more than 1,400 jobs across NY State, with a commitment to utilizing union labor.

"The Champlain Hudson Power Express is a major green infrastructure project that will help transform New York's power grid and help create good-paying jobs in delivering clean renewable energy from Upstate to New York City. This project will provide significant community and public health benefits to the state's most underserved communities."

DOREEN M HARRIS, PRESIDENT AND CEO, NYSERDA

chpexpress.com



Investment Opportunities: Headwinds



- Current Infrastructure is not Adequate
- Key Technology is in Early Stages
- Natural Resources are Critical
- Geopolitics Creates Uncertainty
- Regulatory/Industry Frameworks are Uncertain
- Energy Transition will Impact Workers
- Permitting Processes are Difficult
- Politicization of Climate

Forbes

Battery Push By Tesla And Other EV Makers Raises Child Labor Concerns

THE WALL STREET JOURNAL.

Biden's Electric-Vehicle Push Hits a Speed Bump

Mining projects are being delayed after a plunge in battery-metal prices

FP

Beijing Tightens Its Grip on the Critical Minerals Sector

The West has taken steps to slash its dependence on China, but it still commands supply chains—for now.



Thomson Reuters

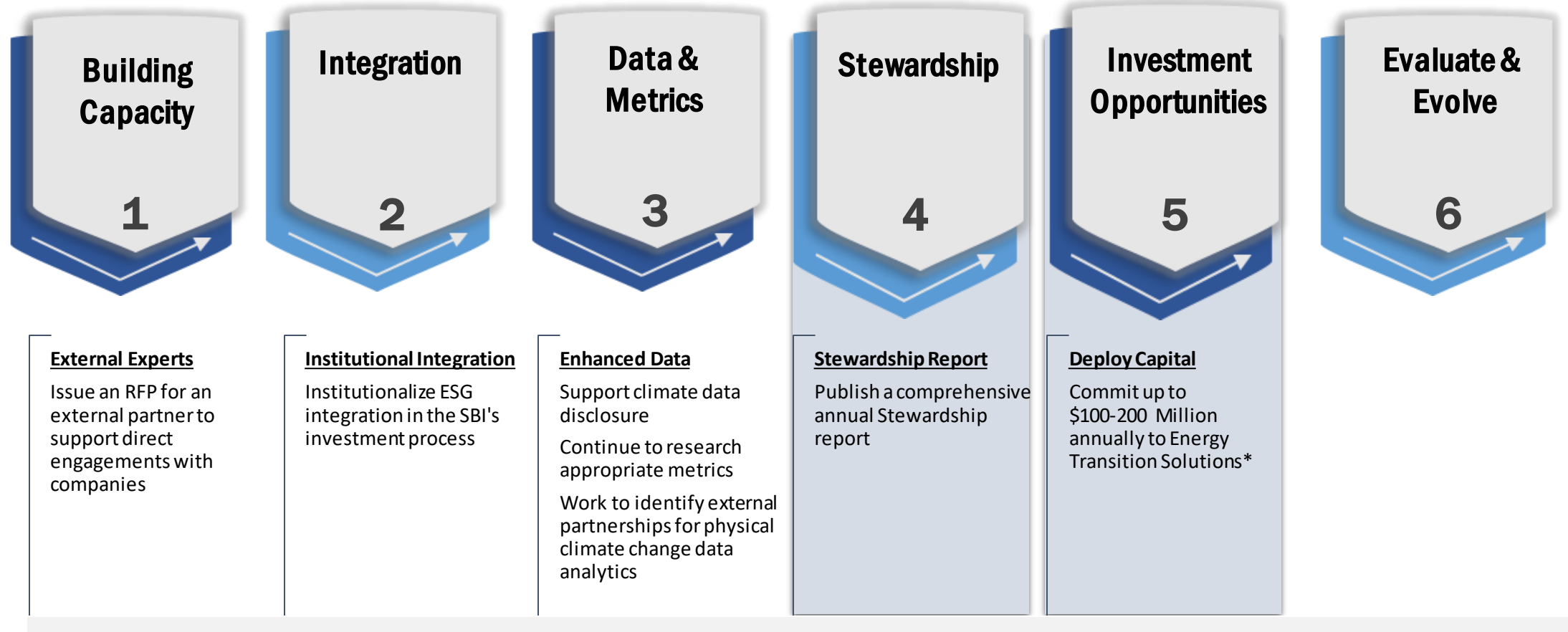
How organizations can best navigate the polarization & politicization of ESG

TIME

Climate Change Became Politicized in the 1990s.

It Didn't Have To Be That Way.

Our Commitments



Board Action

We recommend that the Board adopt a Resolution to add the following to the SBI Investment Beliefs:

"As long-term institutional investors, our fiduciary duty requires us to consider all material risks and opportunities."



Evaluate and Evolve...

This is a continually evolving space – we will continue to adapt within the framework of our fiduciary duty and mission.

