Environmental Defense Fund | BUSINESS

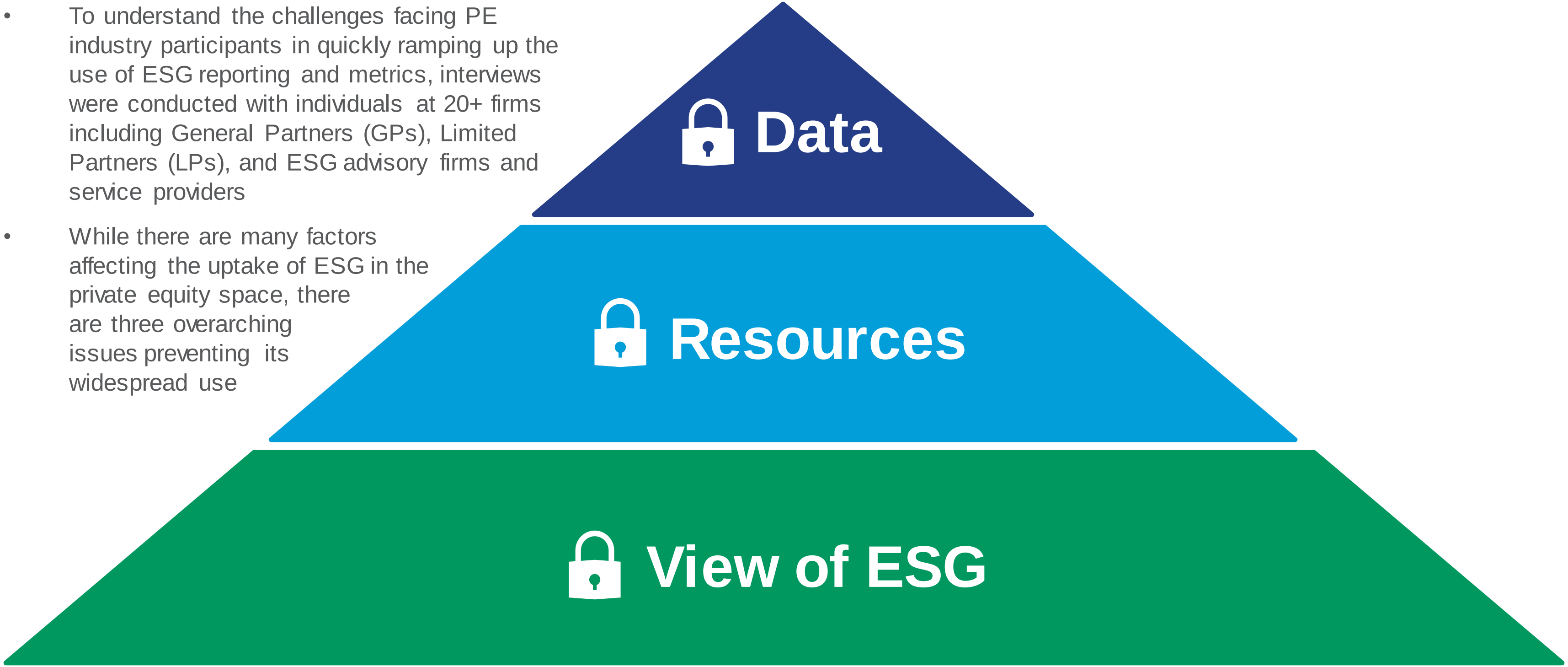
ESG Practices in Private Equity

August 2023

ESG Practices

Challenges to ESG Awareness and Use in PE

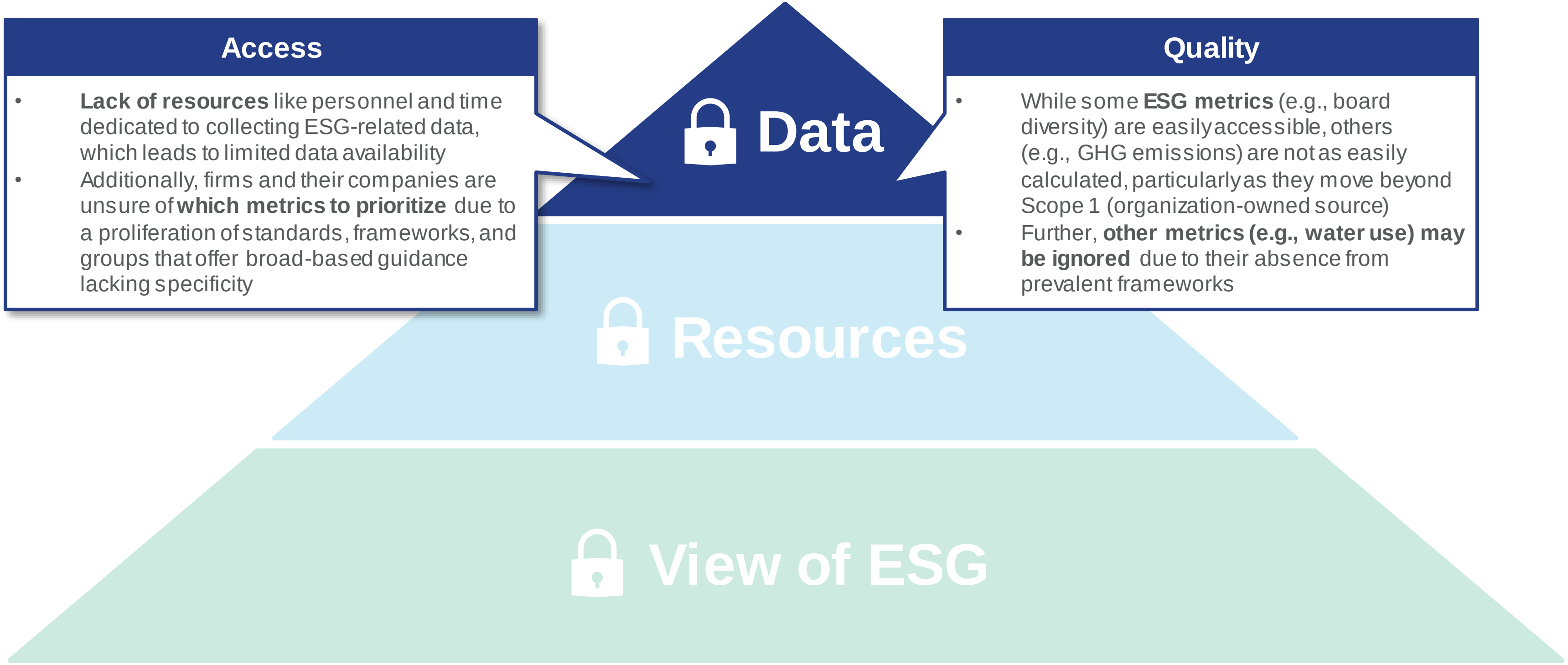
- To understand the challenges facing PE industry participants in quickly ramping up the use of ESG reporting and metrics, interviews were conducted with individuals at 20+ firms including General Partners (GPs), Limited Partners (LPs), and ESG advisory firms and service providers
- While there are many factors affecting the uptake of ESG in the private equity space, there are three overarching issues preventing its widespread use



Challenges to ESG Awareness and Use in PE

Access

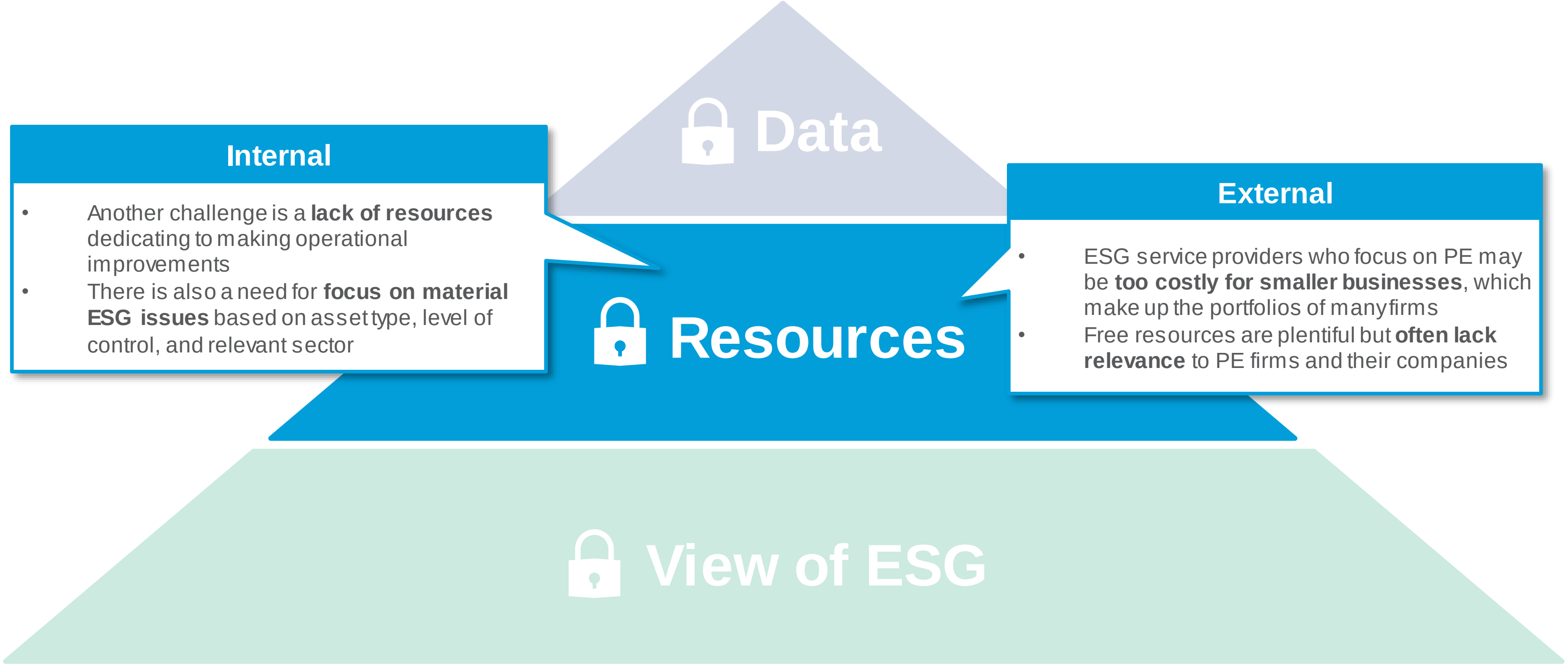
- **Lack of resources** like personnel and time dedicated to collecting ESG-related data, which leads to limited data availability
- Additionally, firms and their companies are unsure of **which metrics to prioritize** due to a proliferation of standards, frameworks, and groups that offer broad-based guidance lacking specificity



Quality

- While some **ESG metrics** (e.g., board diversity) are easily accessible, others (e.g., GHG emissions) are not as easily calculated, particularly as they move beyond Scope 1 (organization-owned source)
- Further, **other metrics (e.g., water use) may be ignored** due to their absence from prevalent frameworks

Challenges to ESG Awareness and Use in PE



Internal

- Another challenge is a **lack of resources** dedicating to making operational improvements
- There is also a need for **focus on material ESG issues** based on asset type, level of control, and relevant sector

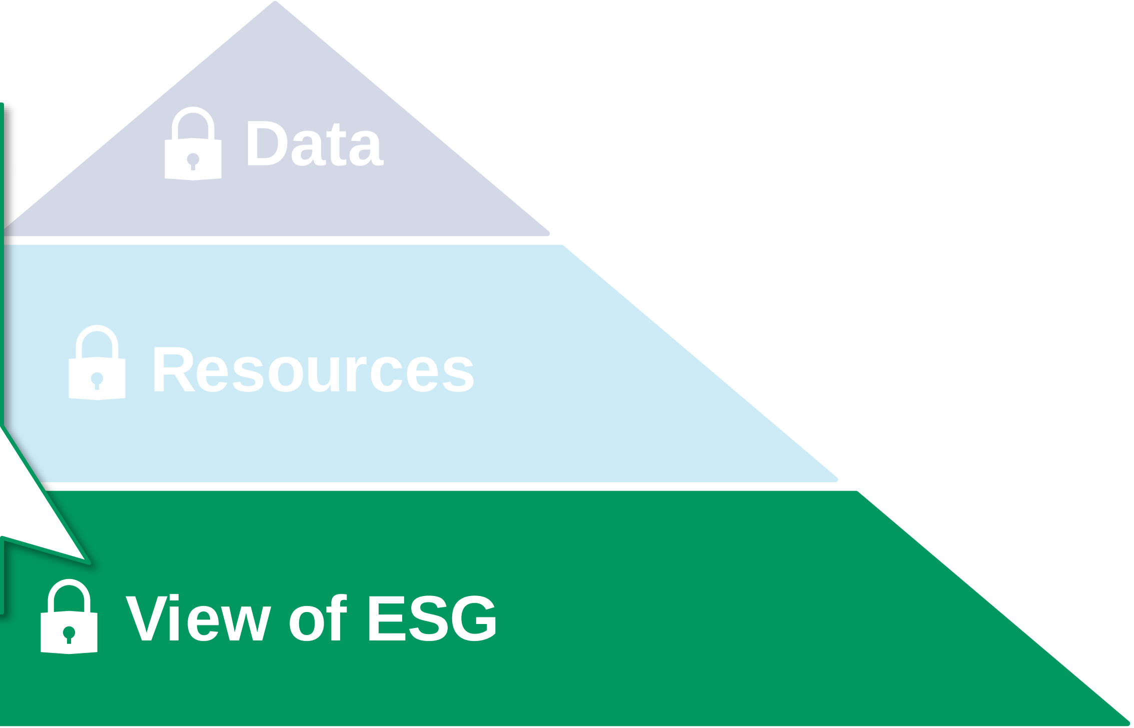
External

- ESG service providers who focus on PE may be **too costly for smaller businesses**, which make up the portfolios of many firms
- Free resources are plentiful but **often lack relevance** to PE firms and their companies

Challenges to ESG Awareness and Use in PE

View of ESG

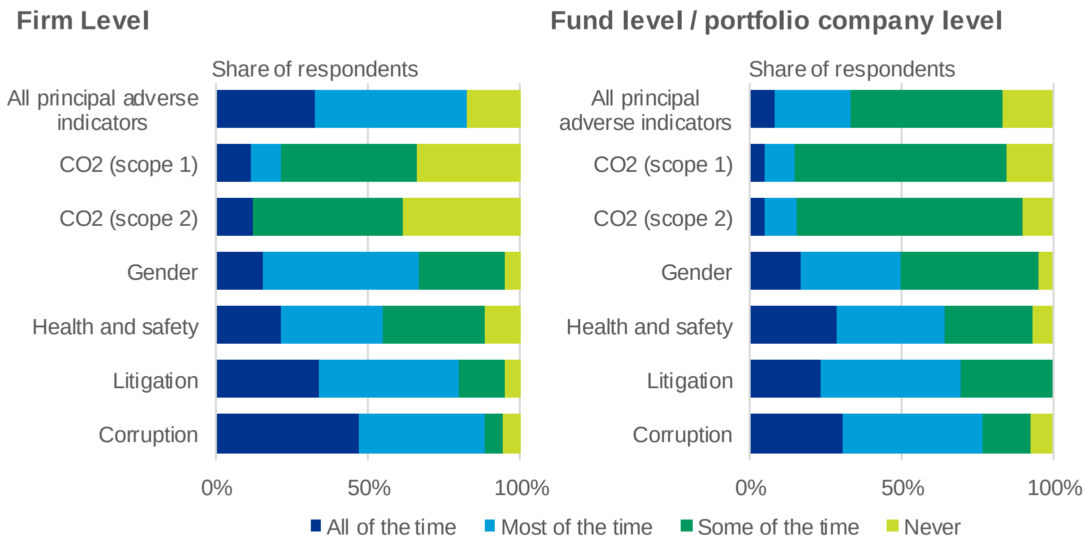
- Some PE firms and their portfolio companies **have not attributed value to using ESG metrics and frameworks**, jeopardizing widespread use
- Many firms and portfolio companies **do not voluntary disclose ESG work** due to the potential for penalties as regulations are enacted
- Casting a shadow is the **anti-ESG political sentiment** in the US, which emerged in 2022
    - Some firms remain unaffected by the backlash while others have moved away from sharing ESG goals and reports due to potential backlash



LPs Driving Need for ESG Data

- A third of LPs (52% in Europe) have set net-zero commitments that affect investment decisions
- Surveyed GPs were most challenged by LP requests related to environmental issues and were less likely to be able to provide any relevant environmental information at the firm-level than at the fund- or portfolio company-level
- In the current capital-raising environment, which has been particularly competitive, LPs have even greater power to drive change
- For select firms, additional pressure may come from LPs who are among the 84 members of the Net-Zero Asset Owner Alliance (NZAOA) as the group's most recent guidance includes target-setting for direct private equity investments
  - Members are required to set targets in 2023 and include all new PE assets by 2025

GPs' ability to provide relevant data across most frequently requested key performance indicators



Note: Only the top two key performance indicators for each category shown.

Source: ILPA-Bain ESG Survey, 2021 (n=103) via Bain & Company, Global Private Equity Report 2022, ILPA and Bain & Company, Closing the ESG Measurement Gap in Private Equity, UNEPFI, Target Setting Protocol, UNEPFI, Net-Zero Asset Owner Alliance raises expectations for members' real economy impact with updated Protocol.

Defining ESG and Impact Investing

- While impact investing is a product, ESG is a framework through which organizations can be operated and assessed broadly
- Since its introduction in 2004, the use of ESG has proliferated and, more recently, been politicized

ESG	Impact Investing
The concept of ESG was first introduced in a 2004 UN Global Compact Initiative report, "Who Cares Wins." The work made recommendations from the 20 participating financial institutions "to better integrate environmental, social and governance issues in analysis, asset management and securities brokerage." **Unlike impact investing, Environmental, Social, and Governance (ESG) refers to three factors that make up a framework, which can be used to evaluate businesses and their affect on a full list of stakeholders beyond shareholders.**	**The Global Impact Investing Network (GIIN) defines impact investing as "invest[ing] with the intention to generate positive, measurable social and environmental impact alongside a financial return."** **Originally defined by the Bellagio Initiative in 2007 as "using profit-seeking investment to generate social and environmental good," before the formation of GIIN in 2009.** **In 2023, capital dedicated to addressing social and environmental issues through impact investing reached $1.2 trillion.**

Source: GIIN, What You Need to Know About Impact Investing, UNEPFI, The Global Compact, Who Cares Wins, The Rockefeller Foundation, Global Impact Investing Network (GIIN), GIIN, Sizing the Impact Investing Market.

Business-Focused Sustainability Landscape

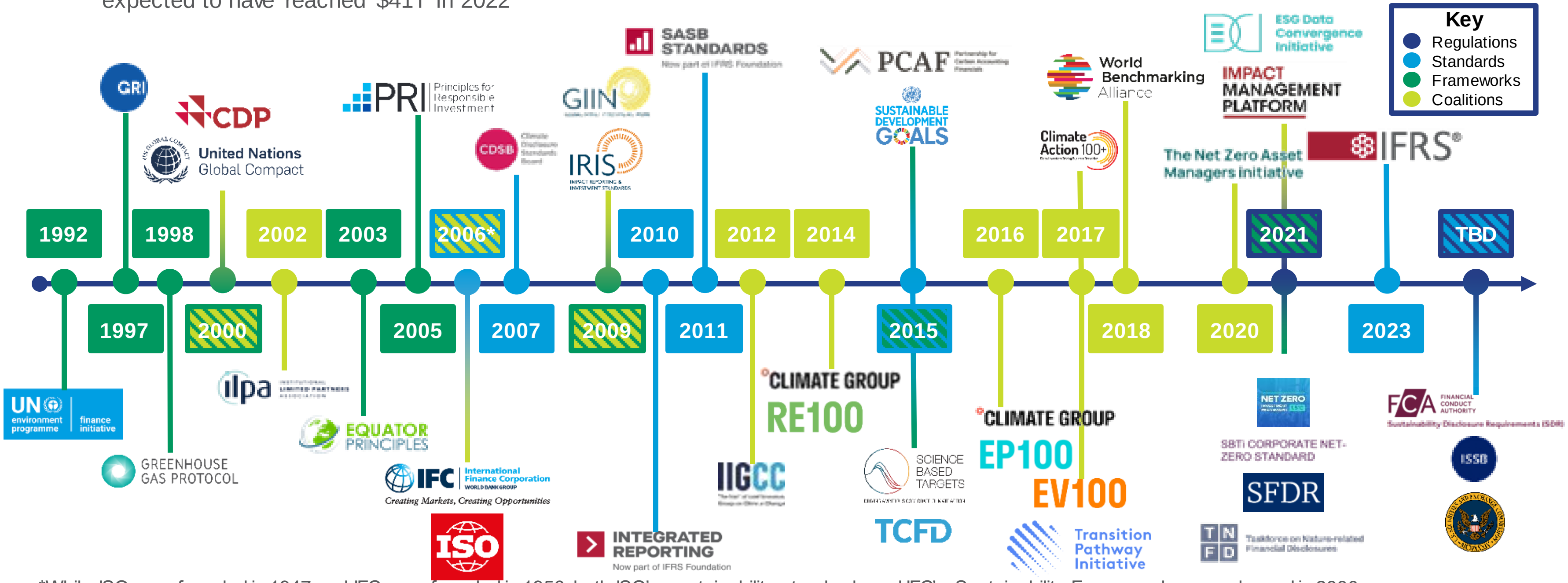
- In addition to the organizations listed here, this landscape includes rating agencies, sustainable indices, scorecard compilers, service providers, and others

Regulations	Sustainability Standards	Sustainability Frameworks	Coalitions and Initiatives
Department for Business, Energy & Industrial Strategy HM Government HM Treasury European Commission FCA Financial Conduct Authority United States Congress U.S. Securities and Exchange Commission MCMXXXIV	IFRS CDSB Integrated Reporting Now part of IFRS Foundation SASB Standards ISSB ISO PCAF SBTi Corporate Net-Zero Standard	CDP Equator Principles Greenhouse Gas Protocol GRESB GRI Impact Management Platform IRIS Net Zero PRI Principles for Responsible Investment Science Based Targets Sustainable Development Goals TCFD TNFD	Asia Investor Group on Climate Change Capitals Coalition Carbon Pricing Leadership Coalition Climate Action 100+ Climate Group ESG Data Convergence Initiative EFRAG GIIN GSG Driving real impact GSIA IIGCC ILPA ICGN International Corporate Governance Network IFC International Finance Corporation World Bank Group Creating Markets, Creating Opportunities Investor Group on Climate Change The Net Zero Asset Managers Initiative OICU-IOSCO Transition Pathway Initiative UN environment programme finance initiative United Nations Global Compact value balancing alliance WDi World Benchmarking Alliance

Source: Positive Investment Imperial, Mapping Out the Sustainability Landscape, 73bit, ESG Ecosystem, David Maywald, The Reporting Landscape is Rapidly Changing for Sustainable Investment and ESG Disclosures, BloombergNEF, and organization websites.

Proliferation of Sustainability-Related Entities

- Since the turn of the century, organizations, frameworks, and standards surrounding sustainability have proliferated
- In the past several years regulation has followed as the total assets dedicated to ESG and sustainability-related strategies have grown, expected to have reached $41T in 2022



*While ISO was founded in 1947 and IFC was founded in 1956, both ISO's sustainability standards and IFC's Sustainability Framework were released in 2006.

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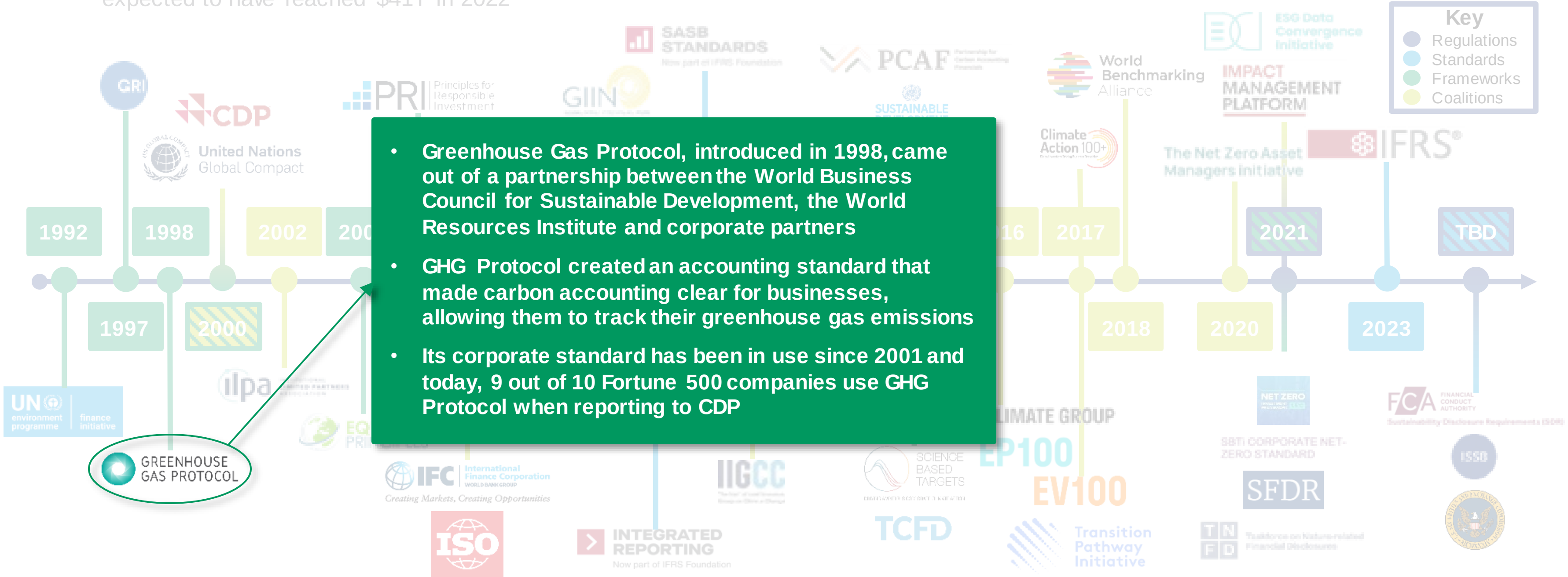

- Greenhouse Gas Protocol, introduced in 1998, came out of a partnership between the World Business Council for Sustainable Development, the World Resources Institute and corporate partners
- GHG Protocol created an accounting standard that made carbon accounting clear for businesses, allowing them to track their greenhouse gas emissions
- Its corporate standard has been in use since 2001 and today, 9 out of 10 Fortune 500 companies use GHG Protocol when reporting to CDP

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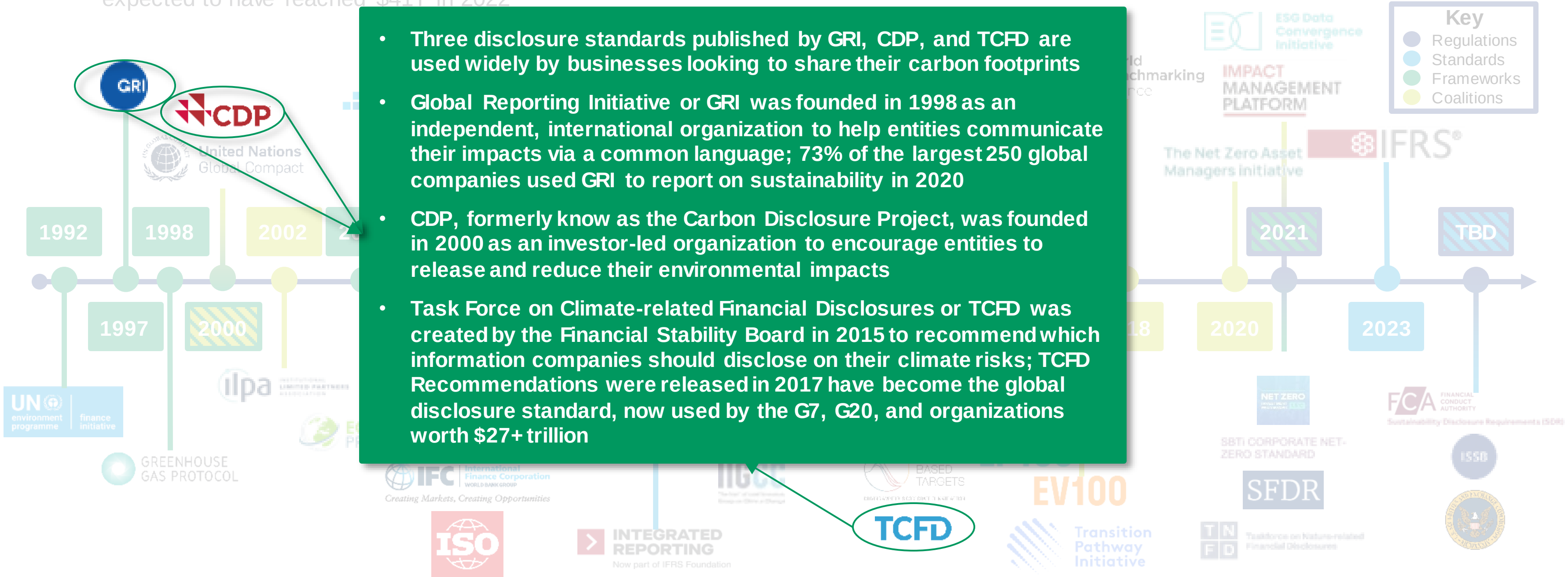
- **Three disclosure standards published by GRI, CDP, and TCFD are used widely by businesses looking to share their carbon footprints**
- **Global Reporting Initiative or GRI was founded in 1998 as an independent, international organization to help entities communicate their impacts via a common language; 73% of the largest 250 global companies used GRI to report on sustainability in 2020**
- **CDP, formerly know as the Carbon Disclosure Project, was founded in 2000 as an investor-led organization to encourage entities to release and reduce their environmental impacts**
- **Task Force on Climate-related Financial Disclosures or TCFD was created by the Financial Stability Board in 2015 to recommend which information companies should disclose on their climate risks; TCFD Recommendations were released in 2017 have become the global disclosure standard, now used by the G7, G20, and organizations worth $27+ trillion**



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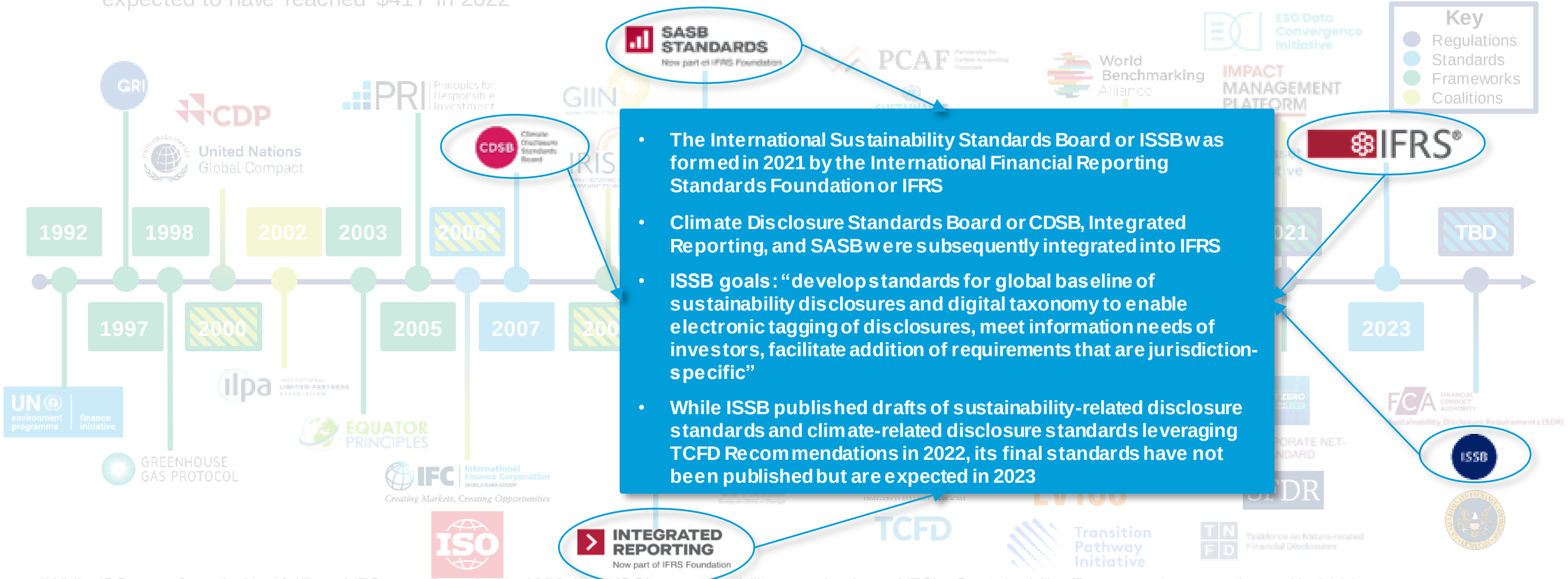

- The International Sustainability Standards Board or ISSB was formed in 2021 by the International Financial Reporting Standards Foundation or IFRS
- Climate Disclosure Standards Board or CDSB, Integrated Reporting, and SASB were subsequently integrated into IFRS
- ISSB goals: “develop standards for global baseline of sustainability disclosures and digital taxonomy to enable electronic tagging of disclosures, meet information needs of investors, facilitate addition of requirements that are jurisdiction-specific”
- While ISSB published drafts of sustainability-related disclosure standards and climate-related disclosure standards leveraging TCFD Recommendations in 2022, its final standards have not been published but are expected in 2023

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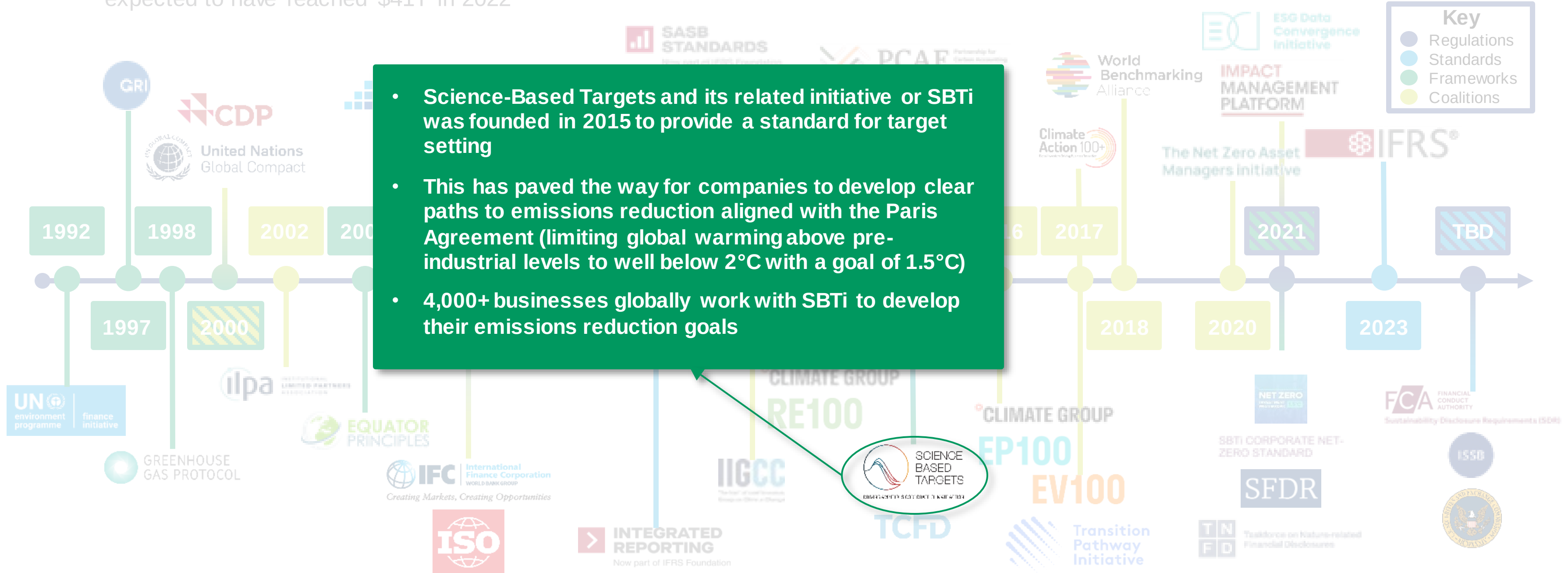

- **Science-Based Targets and its related initiative or SBTi was founded in 2015 to provide a standard for target setting**
- **This has paved the way for companies to develop clear paths to emissions reduction aligned with the Paris Agreement (limiting global warming above pre-industrial levels to well below 2°C with a goal of 1.5°C)**
- **4,000+ businesses globally work with SBTi to develop their emissions reduction goals**

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- **In 2005 at a convening encouraged by the UN, the Principles for Responsible Investment were created by investors to build a more sustainable global financial system**
- **The investors state that ESG issues can affect the performance of portfolios and therefore should be considered as part of their fiduciary duty**
- **The six principles cover the incorporation of ESG factors into investment processes and furthering the uptake and usefulness of the Principles themselves**
- **As of Q1 2023, PRI had 5,381 signatories with $121 trillion in AUM**

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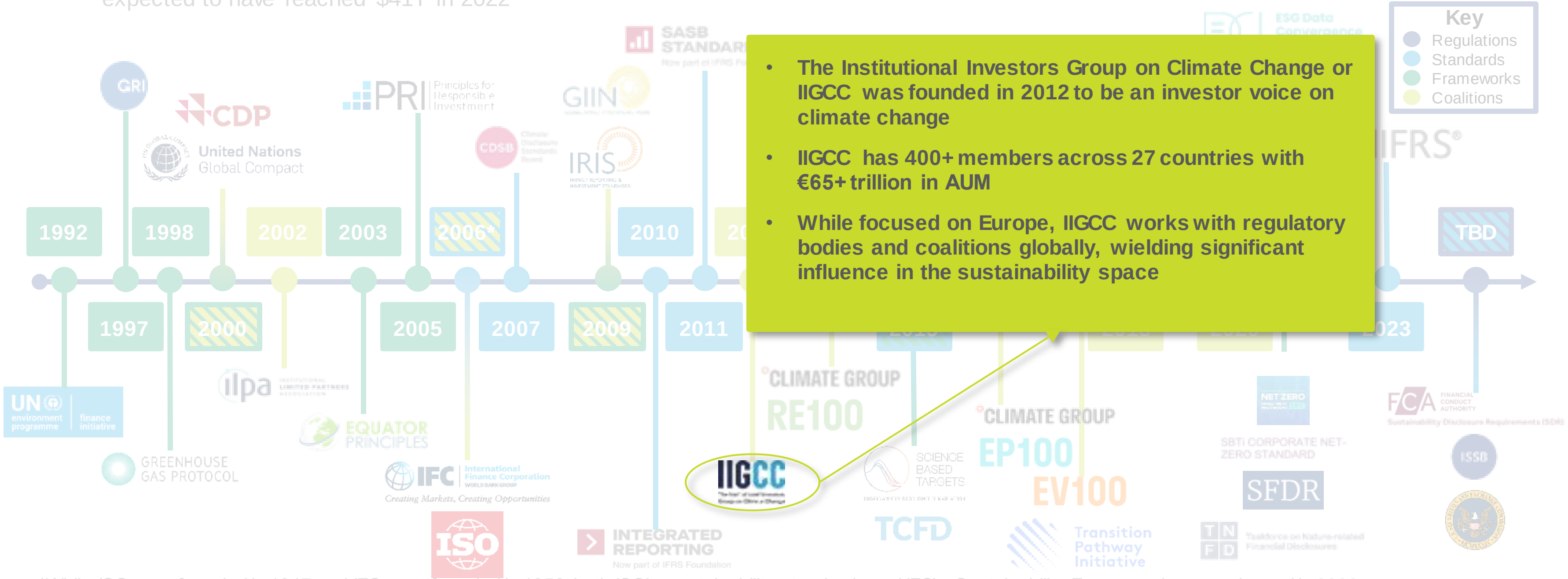

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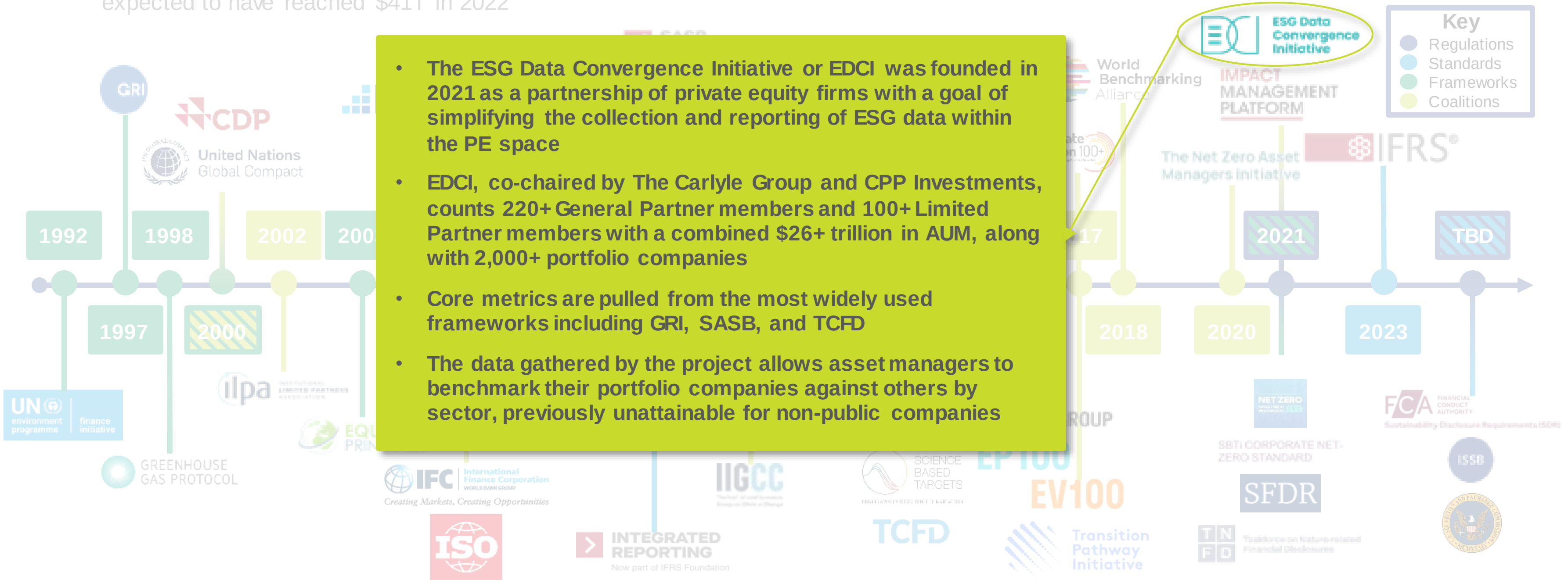

- The ESG Data Convergence Initiative or EDCI was founded in 2021 as a partnership of private equity firms with a goal of simplifying the collection and reporting of ESG data within the PE space
- EDCI, co-chaired by The Carlyle Group and CPP Investments, counts 220+ General Partner members and 100+ Limited Partner members with a combined $26+ trillion in AUM, along with 2,000+ portfolio companies
- Core metrics are pulled from the most widely used frameworks including GRI, SASB, and TCFD
- The data gathered by the project allows asset managers to benchmark their portfolio companies against others by sector, previously unattainable for non-public companies

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- **The Sustainable Finance Disclosure Regulation or SFDR is a European law introduced in 2021 to provide clear information to investors on sustainable investment products; it includes the classification of funds and mandates in three categories, Articles 6, 8, and 9**
- **The Financial Conduct Authority or FCA's Sustainability Disclosure Regime or SDR requirements have not yet been made law but are being drafted**
- **Similarly, the SEC's two proposed Rules, to Enhance and Standardize Climate-Related Disclosures for Investors and to Enhance Disclosures by Certain Investment Advisers and Investment Companies About ESG Investment Practices, received comments in 2022 but have not been finalized**
- **While the SFDR was enacted in 2021, the FCA's SDR and the SEC's two proposed rules have not been completed but are expected in 2023**

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Legal Landscape: EU

- While the NFRD was adopted in 2014, the EU has continued to push forward its regulations with the creation of the EU Taxonomy and upcoming use of SFDR and the NFRD's replacement, CSRD
- Additional new regulation is expected, including an already-drafted social taxonomy

EU Taxonomy

- The EU Taxonomy Regulation, enacted in July 2020, set out to create a list of conditions that must exist for an economic activity to be considered "environmentally sustainable"
- These commonly held definitions allow investors to direct funds to sustainable opportunities
- The classification system establishes the following six objectives that "green" activities will support: climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to circular economy, pollution prevention and control, protection and restoration of biodiversity and ecosystems

SFDR

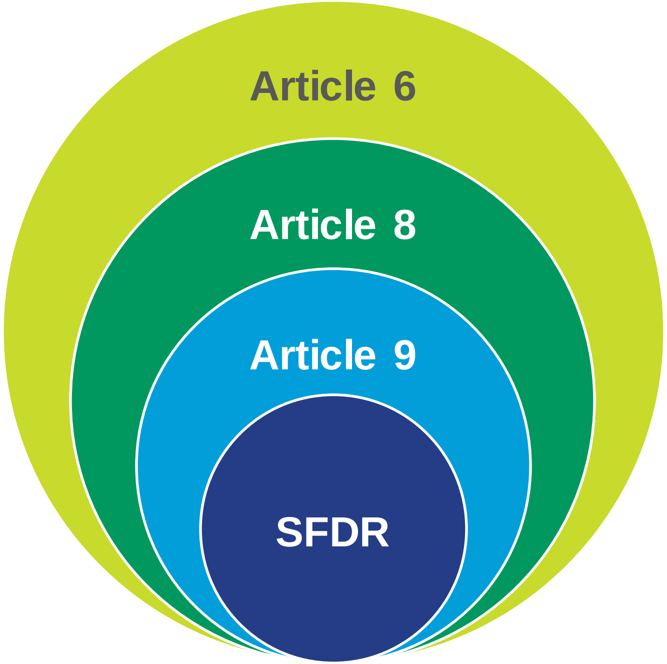
- The European Commission introduced updated standards for the Sustainable Finance Disclosure Regulation (SFDR), subsequently approved by the European Parliament Council, in April 2022 to go into effect for June 2023 filings
- SFDR covers EU-based investment firms and advisors, as well as firms based outside that solicit the EU market
- SFDR was developed to work in parallel with the EU's Green Taxonomy, helping investors identify truly sustainable investment products

CSRD

- The EU's Corporate Sustainability Reporting Directive (CSRD) will replace the Non-Financial Reporting Directive (NFRD) starting in 2025, expanding coverage to more companies
- CSRD is expected to require that companies consider double materiality, or external impacts of a company's activities, in their reporting, aligning with European Sustainability Reporting Standards (ESRS)

Source: Watershed, 2023 Carbon Disclosure: A Global Toolkit for Companies.

Legal Landscape: EU (cont'd)



- SFDR, in force for June 2023 filings, applies to asset managers and financial advisors based in the EU or those who market to the EU
- The regulation has two levels of disclosures:

1. Overview of "defined list of sustainability / ESG risks"
2. Share the Article (6, 8, or 9) with which each product aligns
   - **Article 9**: Products whose activities are qualified as "sustainable" per the EU Taxonomy and for whom ESG is a core goal
   - **Article 8**: Products who activities are qualified as "sustainable" but for whom ESG is not a core goal
   - **Article 6**: Products whose activities are not qualified as "sustainable" and for whom ESG is not a core goal

Source: Watershed, 2023 Carbon Disclosure: A Global Toolkit for Companies, BlackRock, Sustainable investing at BlackRock

Legal Landscape: UK

- While the UK has had to update some of its programs since Brexit, its SDR is ambitious and will set some of the strongest reporting standards going forward
- Also, SDR's alignment with ISSB will allow its coordination with regulations globally as many disclosure programs will likely be based off of ISSB over TCFD going forward

SECR

HM Government

- Streamlined Energy and Carbon Reporting (SECR) requires UK reporting companies to share their energy consumption, Scope 1 and 2 GHG emissions, intensity ratio, and energy efficiency updates

CRFD

Department for Business, Energy & Industrial Strategy

- The UK's Climate Related Financial Disclosures, formerly BEIS for the Department of Business, Energy, and Industrial Strategy, requires sustainability disclosures of large UK companies and is based on TCFD

ESOS

HM Government

- Energy Savings Opportunity Scheme (ESOS) was inherited by the EU and includes an energy audit every four years
- Requires that included organizations disclose total energy consumption and information on planned reduction in consumption

Green Taxonomy

HM Treasury

- Following Brexit, the UK set up the Green Technical Advisory Group (GTAG) to create its own EU Taxonomy, the UK Green Taxonomy

SDR

FCA FINANCIAL CONDUCT AUTHORITY

- The UK's Financial Conduct Authority proposed the Sustainable Disclosure Requirements (SDR) and investment labels, intended to prevent greenwashing, in October 2022 and is expected to finalize these requirements in 2023
- While SDR is still being developed, it may incorporate the existing SECR and ESOS and the FCA currently requires large funds to file a standard TCFD report annually
- SDR is expected to set a strong new standard for ESG reporting, including Scope 3 emissions disclosures and double materiality, and to be aligned with ISSB and the UK's Green Taxonomy

Source: Watershed, 2023 Carbon Disclosure: A Global Toolkit for Companies.

Legal Landscape: US

- The SEC has proposed rules that would serve similar roles to legislation already enacted in the EU, seeking to protect investors by disclosing greater information about climate risks and ESG strategies
- Beyond the SEC's proposed rules and the IRA, there is also a Federal Supplier Climate Risks and Resilience Proposed Rule from the Office of the Federal Chief Sustainability Officer, which would require many federal contractors to report on their greenhouse gas emissions and additional climate disclosures, likely beginning 2024

Inflation Reduction Act

- The Inflation Reduction Act (IRA) was made law in 2022 and offers nearly $370B in subsidies to businesses for electrification of offices, vehicles, and homes; decarbonization of heavy industry; carbon capture; and battery use

Climate-Related Disclosures

- The US Securities and Exchange Commission (SEC) proposed rules "to Enhance and Standardize Climate-Related Disclosures for Investors" in March 2022 to provide investors with information about climate-related risk and opportunities
- The rules build upon aspects of the TCFD framework, using core questions so stakeholders may evaluate climate risks in their portfolios
- The rule is expected to take effect as early as 2024, which would include 2023 data
- This rule would apply to public companies but would also affect private companies planning to IPO

Fund-Labeling

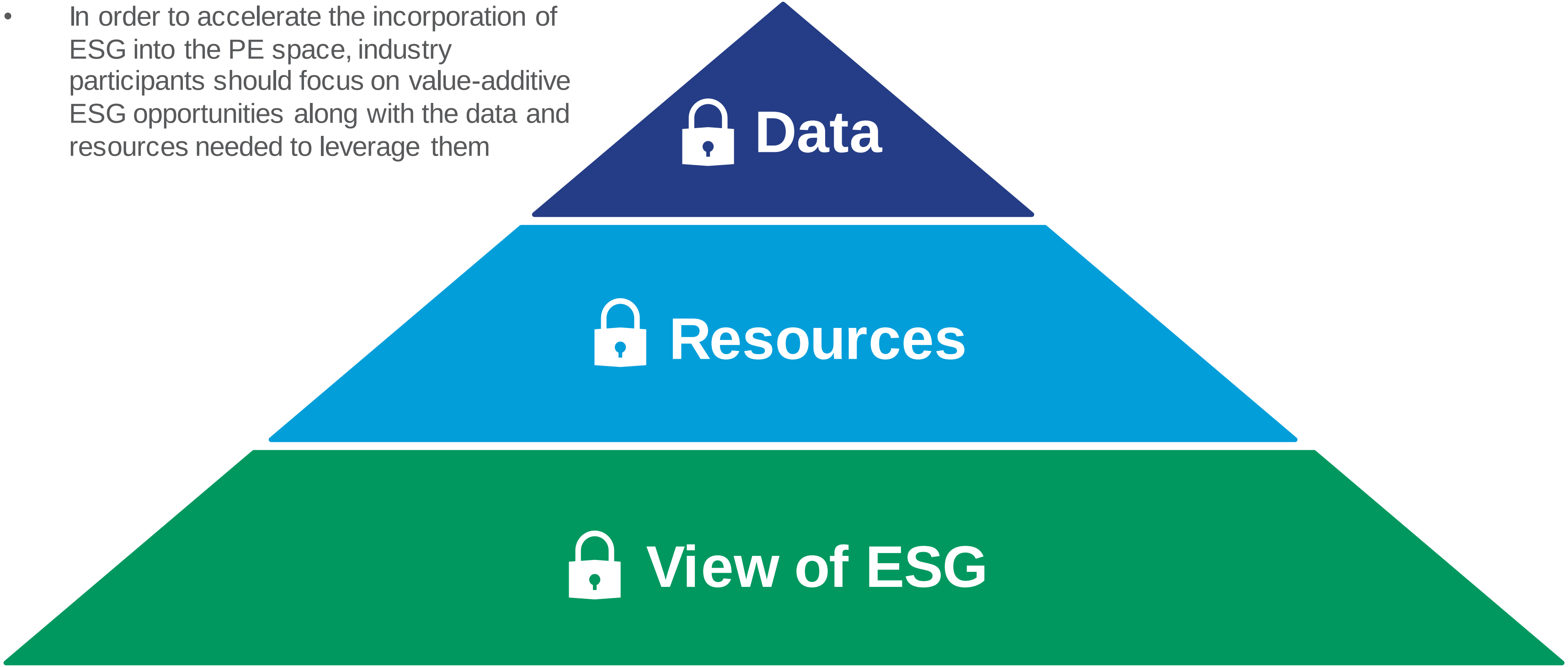
- The SEC also proposed rules "to Enhance Disclosures by Certain Investment Advisers and Investment Companies About ESG Investment Practices" in May 2022 to algin reporting requirements with the significance of ESG to investing strategies
- A second proposed rule would require funds labeled "ESG" to allocate 80%+ of assets in line with that criteria
- These rules are expected to be finalized in October 2023

Source: Watershed, 2023 Carbon Disclosure: A Global Toolkit for Companies.

Recommendations

Address the Challenges to ESG Awareness and Use

- In order to accelerate the incorporation of ESG into the PE space, industry participants should focus on value-additive ESG opportunities along with the data and resources needed to leverage them



Address the Challenges to ESG Awareness and Use

Data

Access

- Armed with proof of ESG's value, hire **dedicated personnel for ESG data collection**
- Use the clarity offered by upcoming regulations and convergence around TCFD and ISSB to **focus efforts on key metrics**

Quality

- Leverage free resources available to assist with **emissions estimates** (e.g., SMI, IIGCC)
- Determine which metrics to focus on by **relevant sector**; increased data on less common metrics (e.g., water use) will boost their visibility and likelihood of future inclusion in frameworks

View of ESG

Address the Challenges to ESG Awareness and Use

Data

Access

- Hire dedicated personnel for ESG data collection
- Focus efforts on key metrics

Quality

- Leverage free resources
- Determine which metrics to focus on by relevant sector

Resources

Internal

- Bolster resources dedicated to making **operational changes**
- Determine **key ESG issues** based on asset type, level of control, and sector

External

- Model **expected ROI from ESG program** and use that to determine whether hiring an external ESG service provider is a viable route
- Select **free resources** specific to PE firms and relevant sector

Address the Challenges to ESG Awareness and Use

Data

Access
- Hire dedicated personnel for ESG data collection
- Focus efforts on key metrics

Quality
- Leverage free resources
- Determine which metrics to focus on by relevant sector

Resources

Internal
- Operational changes
- Determine key ESG issues

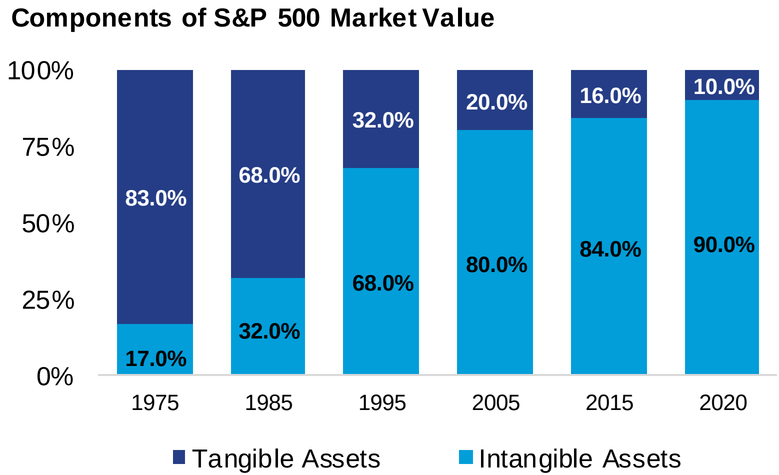
External
- Model expected ROI from ESG program
- Resources specific to relevant sector

View of ESG

View of ESG
- Distribute information demonstrating the value of ESG within a firm and its portfolio companies to **get full buy-in**
- **Collect data internally now** so that public disclosures later have increased accuracy
- Tracking ESG data will yield more definitive **proof of its value to shareholders** and support its alignment with a firm's fiduciary duty

Value of ESG

- While ESG metrics are increasingly being used by companies to gather non-financial, sustainability data, few of these companies are evaluating the financial value of their ESG programs
- Without a conversation between ESG and financial data, it's difficult for companies to demonstrate the value of ESG and prove its necessity in the context of their fiduciary duty
- Since the 1970s, there has been interest in investigating the potential relationship between ESG and financial performance



- A 2015 study examined 2200 prior studies on this topic and found a strong financial case for ESG investing with 90% of such studies discovering a nonnegative relationship between ESG and financial performance including "stock price, cost of capital, and operational achievements"
- Also, as of 2020, intangibles, which are significantly impacted by "brand reputation" and "risk mitigation," make up an estimated 90% of the market value of S&P 500 companies, of which 90% now publish ESG reports
- Perhaps some of the value attributed to ESG is tied to the ability to navigate the trend toward greater disclosure; per McKinsey, these companies with successful ESG programs "demonstrate to stakeholders that they can build and sustain value in the context of regulatory change"
- Still, value depends on ESG programs that center on factors material to a company's core strategy so companies implementing sustainability programs should do so with their specific sector in mind

Source: Stanford Social Innovation Review , Making a Better Business Case for ESG, Ocean Tomo, Intangible Asset Market Value Study, Journal of Sustainable Finance & Investment, ESG and Financial Performance: Aggregated Evidence from More Than 2000 Empirical Studies, Harvard Business School, Corporate Sustainability: First Evidence on Materiality, McKinsey Sustainability, Does ESG Really Matter—and Why?, McKinsey Sustainability, How to Make ESG Real.

Value of ESG (cont'd)

- While a Europe-focused PWC survey of 200 GPs indicated that 50%+ of the surveyed firms achieved "exit multiples between 6% to 10% higher after embedding ESG within their investment life cycles," there may be opportunity for firms to also realize value throughout portfolio companies' hold periods ahead of exit
- In striving to tie ESG metrics to financial performance, Professor Tensie Whelan at the Center for Sustainable Business (CSB) at New York University Stern School of Business led the development of the Return on Sustainability Investment (ROSI™) Methodology
    - This came from prior academic work and consultation with private equity investors and companies across a broad range of industries
    - ROSI™ accounts for both intangibles (e.g., risk mitigation) and tangibles (e.g., increased sales) allowing CFOs to integrate sustainability in corporate strategy and also track and monetize benefits of ESG programs
    - The methodology identifies nine sustainability factors that, after embedding ESG practices into corporate strategy, are improved and lead to greater financial success

ROSI™ Framework

Sustainability Drivers of Financial Performance & Competitive Advantage	Embed	Improve	Drive	Deliver
	When companies embed ESG risks and opportunities into their strategy and decision-making processes, they…	• Risk Management • Stakeholder Engagement • Operational Efficiency • Talent Management • Supplier Relations • Media Coverage • Customer Loyalty • Sales & Marketing • Innovation	Revenue Growth Greater Profitability Higher Corporate Valuation	Quantifiable Business Value & Positive Societal Impact

Source: PWC, EU Private Markets: ESG Reboot, Stanford Social Innovation Review , Making a Better Business Case for ESG, NYU Stern Center for Sustainable Business, Return on Sustainability Investment (ROSI™).

Value of ESG: Case Studies

- Using ROSI™, the following case studies published by Professor Whelan help illustrate the financial opportunity presented by thoughtful ESG practice

Background

- A Canada-based electricity generator had $1 billion in revenue and a fleet mix of coal, natural gas, wind, and solar
- Canada had enacted regulations limiting GHG emissions from unabated coal power plants by 2030 and the utility was interested in determining whether it could realize increased financial value by a pre-2030 exit from coal

Improve			Drive	Deliver
Risk Management	• Lower cost of debt • Lower cost of equity	$ 276.7K 2,376.3K	Greater Profitability	• The utility expected **$3.1M CAD** of annual financial benefit • The stock price also rose with the decision to exit coal before it was required by law
Stakeholder Engagement	• Decreased stakeholder intervention • Accelerated permitting	TBD TBD	Revenue Growth	
Talent Management	• Improved employee retention / decreased turnover • Increased employee productivity	42.1K 439.2K	Greater Profitability Revenue Growth	
Sales & Marketing	• Increased market competitiveness catalyzing higher win rate	TBD	Revenue Growth	

Source: NYU Stern Center for Sustainable Business, Building the Business Case for Sustainability - Investor Discussion, Government of Canada, Coal Phase-Out: the Powering Past Coal Alliance.

Value of ESG: Case Studies (cont'd)

Background

- A US-based pharmaceutical manufacturing company wanted to increase efficiency ahead of the end of exclusivity in multiple key markets
- The company developed a new process to reduce manufacturing costs for a strategic drug that would also reduce its production's environmental impact through the following reductions: 82% less energy use, 80% fewer chemical ingredients, 81% less water use, 77% less waste generation, and 75% fewer GHG emissions
- The manufacturer was interested in the financial value of these reductions and whether they would indicate an opportunity for additional financial benefits generated by other reductions

Improve			Drive	
Operational Efficiency	• Decreased resource consumption • Decreased waste generation • Decreased emissions	$ 943.0K 363.7K 240.0K	Greater Profitability	$ 1,546.7K

Deliver

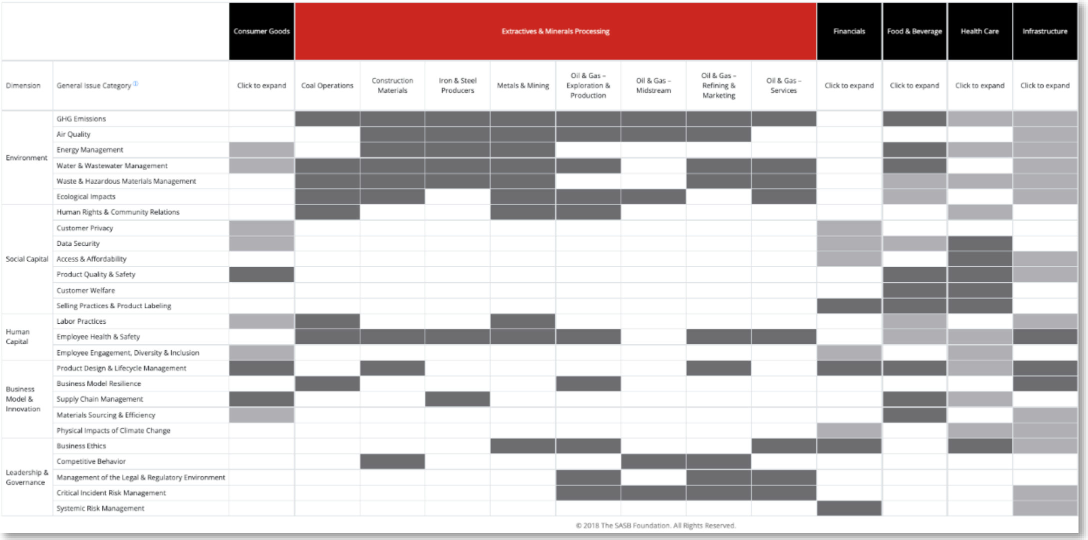
- By focusing on reducing the quantity of water purchased and bringing carbon emissions below a proposed regulatory limit, the manufacturer estimated its ability to boost profitability by saving **$1.5M USD** per 100MTonnes of production
- In the first year after losing exclusivity, while most companies typically retain only 40% of revenue from similar products, the company was able to retain 65% of its prior year's revenue attributable to the drug due to the price decrease enabled by its increased efficiency

Source: Harvard Business Review , How to Talk to Your CFO About Sustainability, NYU Stern Center for Sustainable Business, Building the Business Case for Sustainability - Investor Discussion.

Guidance by Industry

- As the effectiveness and value of ESG programs depend on their ability to tie into a company's corporate strategy, firms should make sure to focus on relevant metrics
  - One guide for this is SASB's materiality matrix, shown in part to the right, which helps a company determine the significance of various issues using sectors of focus
  - SBTi also offers sector-specific guidance on target setting within the highest-GHG-emitting and hardest-to-abate industries
- Other guides, like those from Ceres and the Sustainable Markets Initiative, focus on private equity specifically and provide direction on engaging portfolio companies depending not only on sector but also on investment stage and geography

SASB's Materiality Map

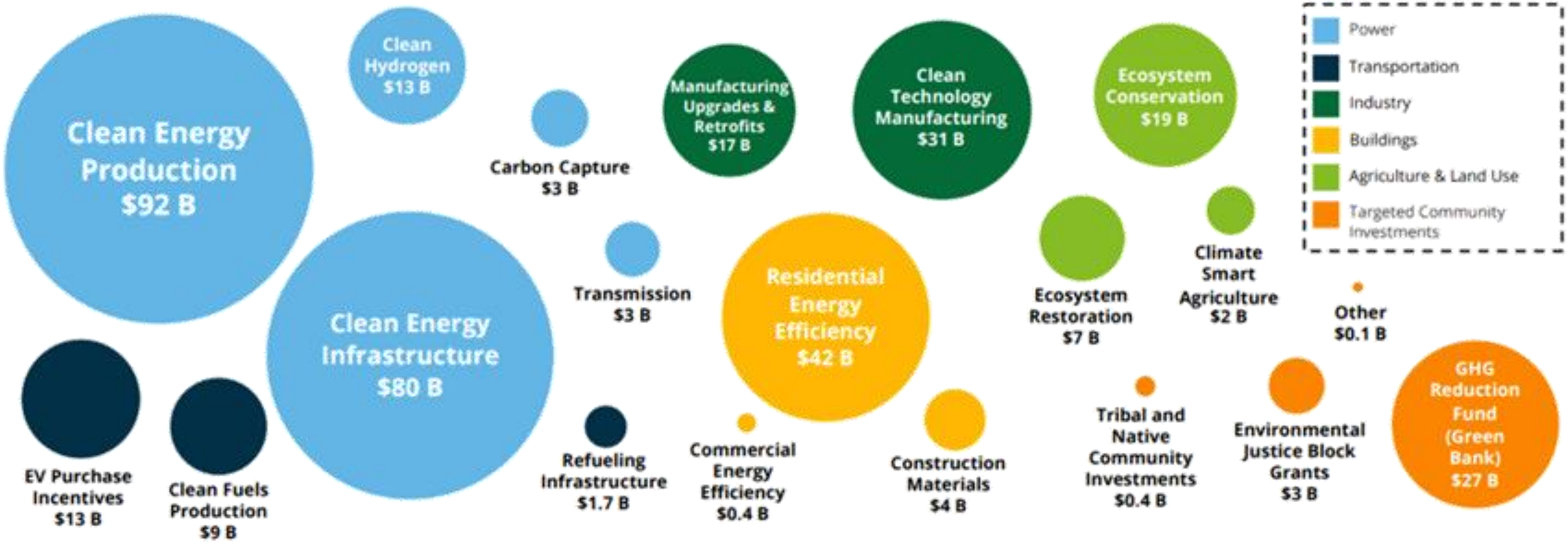


Source: SASB, Exploring Materiality, SBTi, Sector Guidance, Ceres, Data as the Key: Essential Steps for Decarbonizing Private Equity, Sustainable Markets Initiative, ESG Metrics in Private Equity.

Leveraging IRA to Achieve ESG Goals

- The IRA is the largest climate legislation enacted in the US with $369 billion in climate spend available
- The below sectors stand to benefit most by leveraging the IRA funds available

IRA Climate Spend by Category (Congressional Budget Office Estimates)



Source: Environmental Defense Fund and Deloitte, The Inflation Reduction Act: A Snapshot for Business.

Leveraging IRA to Achieve ESG Goals (cont’d)

- The below outcomes detail the projected impact of the IRA on each of the five sectors

Power: $191B

- Accelerated renewable energy production
- Lowest levelized cost of clean electricity in world
- Cost competitiveness of green hydrogen with blue
- Increased nuclear power production

Transportation: $23.7B

- Accelerated EV adoption by several years as price parity with ICE approaches
- Decreased TCO for electric trucks, likely below that of diesel trucks for most light and medium duty truck usage cycles

Industry: $48B

- Boost in domestic production of key energy and EV components
- Improved economics for carbon capture and DAC
- Accelerated timeline for emerging clean tech in hard-to-abate sectors

Buildings: $46.4B

- Significant expected increase in commercial building EE retrofits
- High expected demand for residential demand-side EE products incl. lighting, HVAC, and building envelope

Agriculture & Land Use: $28B

- Advancement of climate smart and organic farming and conservation practices
- Improved climate change adaptation and resilience of agricultural production
-

Source: Environmental Defense Fund and Deloitte, The Inflation Reduction Act: A Snapshot for Business.

Leveraging IRA to Achieve ESG Goals: Case Studies

- There are many opportunities to leverage IRA funds for businesses across all five sectors

Power: $191B

- Purchase electricity powered by renewable energy at lower costs
- Work with domestic material suppliers on production of wind and solar to minimize supply chain risk

Transportation: $23.7B

- Procure EVs when purchasing new vehicles for fleet at prices approaching ICE vehicles and subsequently reap the benefits of not being exposed to fluctuating gas prices
- Install EV charging infrastructure to increase foot traffic

Industry: $48B

- Upgrade manufacturing facilities to electrify production and decrease costs and downtime caused by unreliable, older equipment
- Create join venture with domestic supplier to reap domestic manufacturing incentives and lower project costs

Buildings: $46.4B

- Lower upfront costs of energy efficiency improvements through tax credits and attract higher-quality, higher-paying tenants; also, benefit from reduced operational energy costs within building

Agriculture & Land Use: $28B

- Boost profits by lowering input costs through electrification of operations and vehicles at reduced rates, thus lowering ongoing energy costs
- Use subsidized organic farming practices to raise prices by catering to customers willing to pay a premium for sustainable agriculture products

Source: Environmental Defense Fund and Deloitte, The Inflation Reduction Act: A Snapshot for Business.

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Further Reading

https://business.edf.org/esg