

# TCFD Insights Series

STOXX Europe 600

November 2022

In 2021,

**84%**

of companies  
(503) listed on the  
STOXX Europe 600  
index disclosed  
through CDP.

In 2021, 503 companies (84%) listed on the STOXX Europe 600<sup>1</sup> index, representing a market capitalization of over US\$11 trillion, responded to CDP's climate change questionnaire<sup>2</sup>.

This analysis looks at the disclosing organizations' alignment with the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD) and the reported financial impacts of climate-related risks and opportunities.

1. STOXX Europe 600 constituent countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

2. This data reflects the STOXX 600 index as of September 1, 2020, and the companies' responses to CDP's 2021 Climate Change questionnaire.

# Key findings

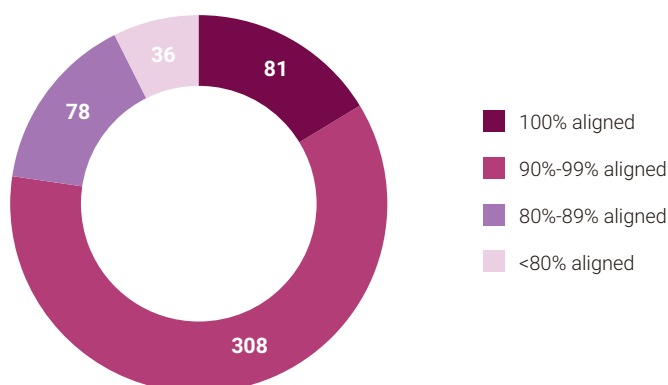
- ▼ Only **16%** of the 503 disclosing STOXX 600 companies provided information on all of the TCFD-related questions.
- ▼ The reported potential financial benefits of climate-related opportunities in aggregate are 1.5 times higher than the potential financial impacts of climate-related risks.
- ▼ In aggregate, it is less costly for businesses to manage their risks than bear the potential financial impacts of the risks materializing (~US\$206 billion vs. ~US\$1 trillion).
- ▼ Aggregated across sectors, the cost of realizing climate-related opportunities is much lower than the potential financial benefits of the opportunities (~US\$393 billion vs. ~US\$1 trillion).

Evaluating the TCFD alignment of companies listed on this European index is particularly relevant because in April 2021, the European Commission issued a proposed Corporate Sustainability Reporting Directive (CSRD)<sup>3</sup>. The CSRD will ensure that companies publicly disclose the climate-related risks and opportunities they face as well as the impact their business has on the environment. Company disclosures under the CSRD will need to be in line with the European Sustainability Reporting Standards (ESRS) which are being developed in alignment with existing standards and frameworks like the TCFD. Large companies are anticipated to be required to start reporting under the directive as early as 2024<sup>4</sup>.

## TCFD alignment overview

- 1** As was the case for the S&P 500 and FTSE 350 companies analyzed as part of this [Insight Series](#), a vast majority of the STOXX 600 companies analyzed disclosed against at least 80% of the TCFD recommendations; and a significantly lower number (16% of the sample) responded to all TCFD-related questions within CDP's climate change questionnaire<sup>5</sup>.

**Figure 1: TCFD alignment – count of disclosing companies**







3. [European Commission: Corporate sustainability reporting](#).

4. [EY: Sustainability reporting - what to know about the new EU rules?](#).

5. A company disclosure is counted as fully or 100% aligned with TCFD recommendations if the information has been provided against all the 25 TCFD-aligned questions; 90-99% aligned are responding to 23-24 questions; 80-89% aligned are responding to 20-22; and <80% refers to the rest of companies that are responding to less than 20 questions. This doesn't represent the qualitative assessment of the response.

2 Similar to the S&P 500 and FTSE 350 indexes, STOXX 600 companies demonstrated the highest level of alignment with governance-related TCFD recommendations and the lowest alignment on strategy recommendations. However, STOXX 600 companies generally had a higher level of alignment across all key TCFD recommendations compared to the other two indices<sup>6</sup>.

**Table 1: STOXX 600 disclosing companies' alignment with TCFD thematic areas and performance against key indicators**

Thematic area	Aligned disclosures (% of sample) <sup>7</sup>	Key indicators	Response (% of sample)
 Governance	97%	Disclosed having board-level oversight for climate-related issues	99%
 Strategy	38%	Strategy or financial planning being influenced by climate-related risks and opportunities	97%
		Disclosed having developed a low-carbon transition plan	67%
		Reported using quantitative and qualitative scenario analysis	49%
 Risk management	45%	Have processes to identify and assess climate-related risks and opportunities	98%
		Reported covering the whole value chain in their risks assessments	76%
 Metrics and targets	86%	Disclosed having an active emissions target in the reporting year	90%
		Have targets approved by the SBTi <sup>8</sup>	21%
		Reported both Scope 1 and Scope 2 emissions	97%
		Reported at least one category for Scope 3 emissions <sup>9</sup>	94%
		Disclosed implementation of an internal carbon price	42%

6. It is worth noting that around 22% of STOXX Euro 600 constituents are from the UK.

7. The percentages in this column reflect the proportion of companies that are aligned with all the indicators (captured within the CDP questionnaire) within each thematic area. These include the key indicators but are not limited to them.

8. Verified with SBTi with a cut-off date of December 31, 2020.

9. The Task Force encourages organizations to disclose Scope 3 emissions - subject to materiality. CDP analysis shows that a high proportion (90%) of disclosing FTSE 350 companies reported Scope 3 emissions, however the proportion is relatively low in material categories in comparison with categories that aren't material to the nature of business such as employees commuting and business travel. [CDP's Technical Note: Relevance of Scope 3 Categories by Sector](#) responds to this need and signposts the categories that companies should be measuring and taking action to mitigate.

# Climate-related risks and opportunities in focus

**97%**  
of disclosing companies have reported that their businesses, strategy, or financial planning are influenced by climate-related risks or opportunities.

 **83%**  
identified both climate-related risks and opportunities

 **8%**  
identified only climate-related opportunities

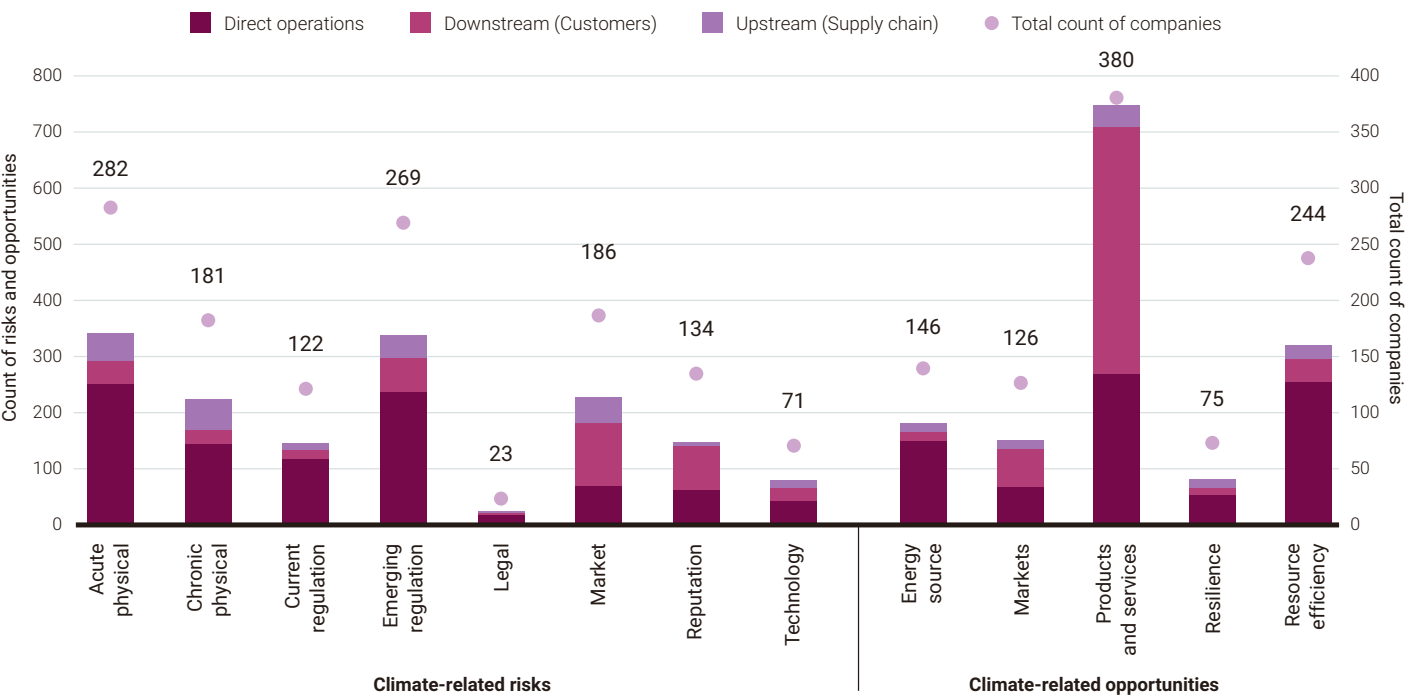
 **<1%**  
identified only climate-related risks

 **8%**  
have not identified any climate risks and opportunities, or have not provided a response

## Risks and opportunities in the value chain

The majority of risks and opportunities reported by companies in this sample were identified in their direct operations with few exceptions – a similar trend was observed in S&P 500 and FTSE 350 companies. However, compared to the other two indices, a higher proportion of the STOXX 600 companies (76% of the sample) covered their entire value chain in the risk assessment processes (**Table 1**).

**Figure 2:** Reported climate-related risks and opportunities in the value chain stages




The most frequently reported risk types are acute physical risks (282 companies, 56% of the sample) and emerging regulations (209 companies, 53% of the sample). On the other hand, most companies reported opportunities related to products and services (380 companies, 75% of the sample) and resource efficiency (244 companies, 48% of the sample).

# Financial implications of climate-related risks and opportunities

  
**The reported benefits of climate-related opportunities are approximately 1.5 times higher than the potential financial impact of climate-related risks.**

**84%**

(up to US\$1.1 tn)  
of the total potential impact figure could materialize over the short to medium-term.



Out of the 97% of disclosing companies that identified climate-related risks or opportunities with the potential to impact strategy and financial planning, approximately **one-third did not provide potential financial impact figures**<sup>10</sup>. Aggregating the responses, climate-related risks can have a potential financial impact ranging from US\$1.1-1.2 trillion. The reported benefits of climate-related opportunities are approximately 1.5 times higher – ranging from US\$1.4-1.9 trillion.

## Financial impacts of climate-related risks

### 1 Top three climate-related risks based on their potential financial impact:



▼ **Emerging regulation:** The aggregated financial impact of this risk was up to US\$394 billion, in which financial services (FS) companies reported the highest proportion (~84%). FS companies largely associated emerging regulations with credit risk due to the possibility that their clients will be significantly impacted by these regulations and will find it difficult to pay back debts. Almost all non-financial companies reported that emerging regulations can have financial impacts related to 1) increased direct and/or indirect costs and 2) decreased revenues due to reduced demand for products and services, and reduced production capacity.



▼ **Chronic physical:** Driven by rising mean temperature and sea levels, the aggregated potential financial impact reported was up to US\$279 billion. Approximately 90% of the reported financial impact within this risk category was reported by financial services companies.



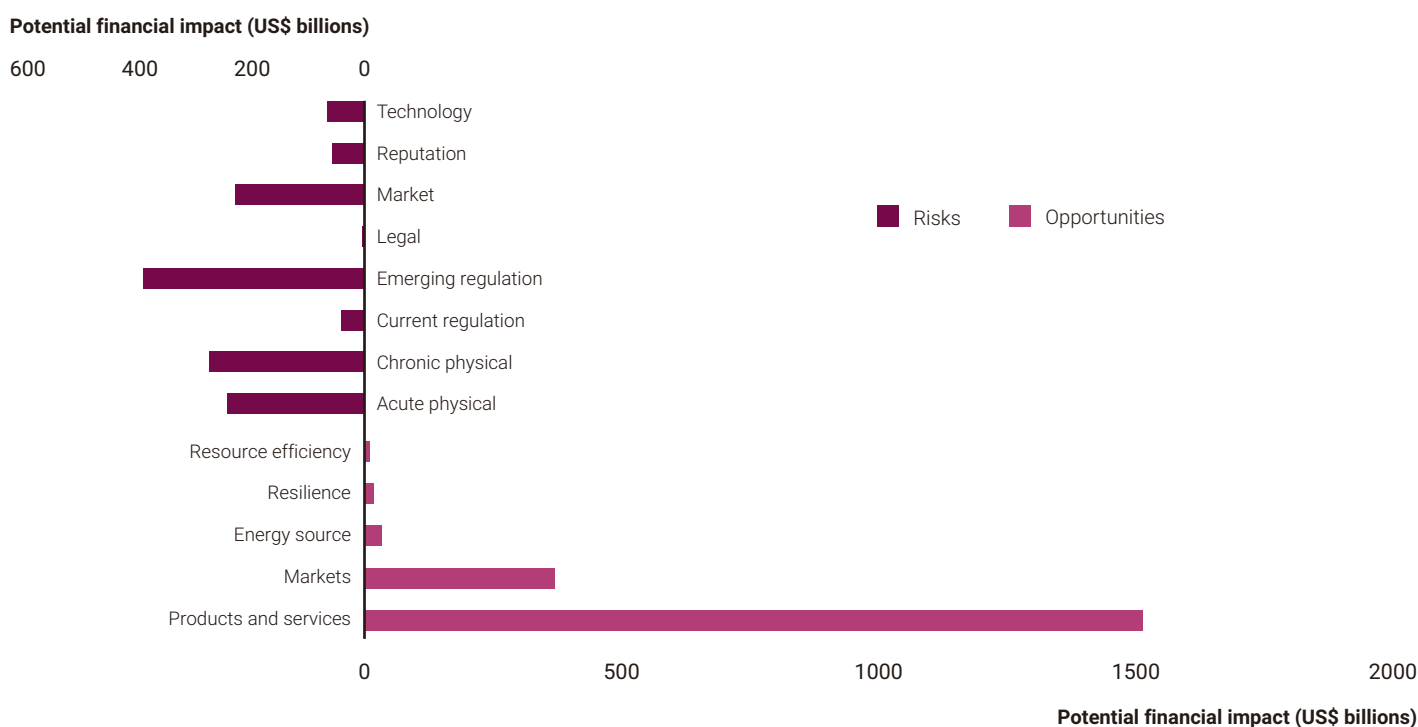
▼ **Acute physical:** Increased severity and frequency of extreme weather events can impact companies financially by up to US\$250 billion. Financial services companies see it as a direct increase in costs and increased insurance claims liability. Most of the non-financial sector reported acute physical risks potentially hindering their production capacity, thus reducing revenues.

**2** About 72% (up to US\$967 billion) of the potential financial impact is assessed as “likely”, “very likely” or “virtually certain” to materialize.

**3** In terms of the time horizons reported, about 84% (up to US\$1.1 trillion) of the total potential impact figure could materialize over the short to medium-term.

10. 342 and 346 companies provided financial impact figures for climate-related risks and opportunities respectively.

**Figure 3: Reported potential financial impacts associated with risk and opportunity types**



## Financial impacts of climate-related opportunities

### 1 Top three climate-related opportunities based on their financial impacts:



▼ **Products and services:** The aggregated potential financial benefit was estimated to be up to US\$1.5 trillion, significantly higher than other categories. Of this, approximately US\$1.1 trillion is estimated to be associated with increased revenues due to demand for products and services supporting the transition to a low-carbon economy. About 70% of the potential financial impact value within this opportunity type is reported by the FS (~US\$776 billion) and manufacturing industries (~US\$299 billion).



▼ **Markets:** The potential financial benefit of market-related opportunities is up to US\$371 billion. Disclosing companies estimate an increase in revenues resulting from access to new and emerging markets, and FS companies estimate a diversification of financial assets. Examples of reasons reported by these companies include a rising demand for capital investment in renewables and better returns on investments in low emission technologies. By financial impact, FS (US\$183 billion), retail (~US\$90 billion) and manufacturing (~US\$51 billion) sectors cover close to 90% of the total financial impact in this opportunity category.



▼ **Energy sources:** Up to US\$33 billion was reported as the potential financial benefit, of which a large proportion (~86%) is expected to be driven by the use of low-emission sources of energy. This opportunity driver was mainly reported by fossil fuel companies that expect to see increasing revenues resulting from access to new and emerging markets.

### 2 Approximately 94% of the reported potential financial benefit was assessed by disclosing companies as “likely”, “very likely” or “virtually certain” to materialize.

### 3 Approximately 90% of the total potential impact figure could materialize over the short-term (~US\$748 billion) to medium-term (~US\$1 trillion).



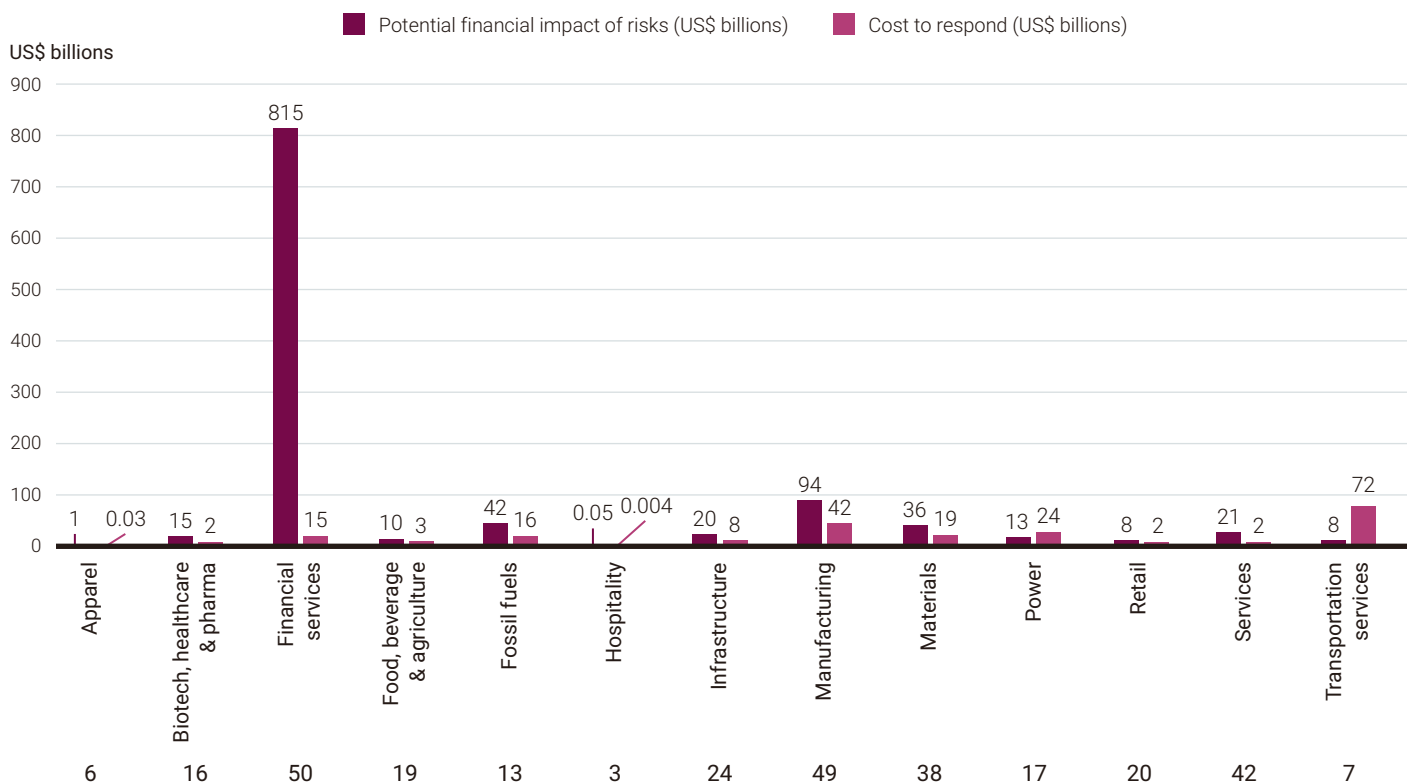
## Financial impact of climate-related risks and opportunities vs response/materialization costs

**In aggregate, it is less costly for businesses to manage their risks than bear the potential financial impacts of the risks materializing.**

A subset of the companies that reported financial impact values also reported the costs to respond to risks, or to realize the opportunities<sup>11</sup>. The majority of reported financial implications for both risks and opportunities are concentrated in the financial services industry, which is the biggest sector in the sample. Interestingly, in this subset of the FS sector, companies reported a significantly higher financial impact of risks than of opportunities. However, there are 17 FS companies not included in this subset (as they did not provide the cost to realize opportunities). Those 17 companies reported a US\$600 billion financial benefit of opportunities figure between them. The industry also reported the highest ratio of value to costs – ie the cost to realize opportunity or mitigate risk was much lower than the financial impact of the risk or opportunity materializing.

► In aggregate, it is less costly for businesses<sup>11</sup> to manage their risks than bear the potential financial impacts of the risks materializing (~US\$206 billion vs. ~US\$1 trillion).

**Figure 4: Potential financial impact of risks and associated cost to respond across different industries**



This trend is true for most industries, except for the power and transportation services sectors. Both sectors would have to undergo significant structural and business model changes to respond to risks and opportunities, which would incur significant costs.

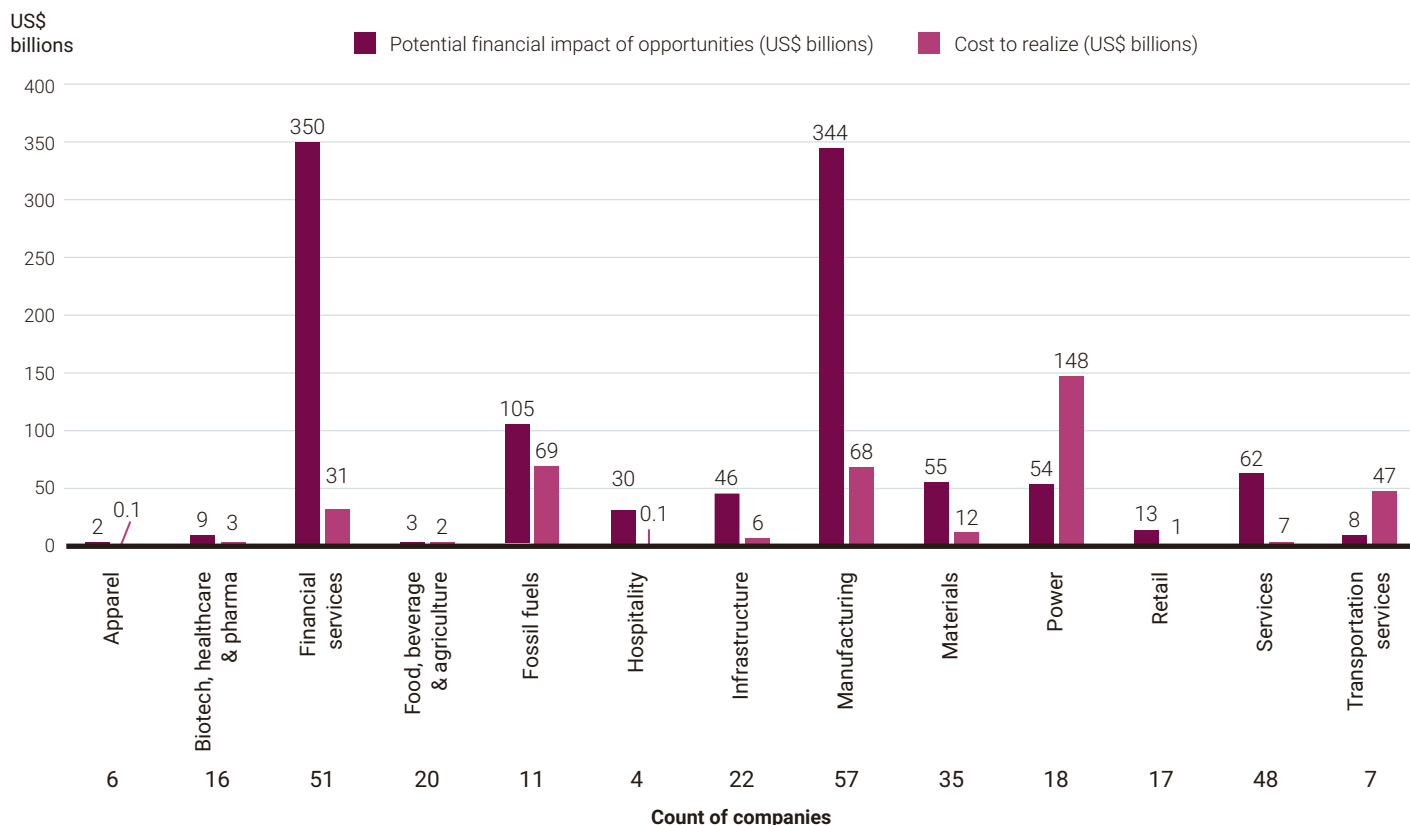
- **European power companies** from the sample reported higher costs due to significant capital investments in decarbonizing their energy mix or increasing the share of renewable energy (installation of solar photovoltaics etc), building infrastructure to accommodate e-mobility, and expansion of their business to new and emerging markets.
- **Transportation companies** that disclosed through CDP associated higher costs due to heavy investments for decarbonizing their fleets by adding new and fuel-efficient freight and public transport options.

11. 304 and 312 companies disclosed the cost to respond/materialize estimates along with the potential financial impact of climate-related risks and opportunities respectively.

Assets in these two sectors are generally long-lived, so despite the significant initial investment needed for transitioning to low-carbon operations, these companies will benefit in the long-term.

- For the subset of companies<sup>11</sup> when aggregated across sectors, the cost of realizing climate-related opportunities is much lower than the potential financial benefits of the opportunities (~US\$393 billion vs ~US\$1 trillion).

**Figure 5: Potential financial impact of opportunities and cost to realize across different industries**



## ABOUT CDP

CDP is a global non-profit that runs the world's environmental disclosure system for companies, cities, states and regions. Founded in 2000 and working with more than 680 financial institutions with over \$130 trillion in assets, CDP pioneered using capital markets and corporate procurement to motivate companies to disclose their environmental impacts, and to reduce greenhouse gas emissions, safeguard water resources and protect forests. Over 14,000 organizations around the world disclosed data through CDP in 2021, including more than 13,000 companies worth over 64% of global market capitalization, and over 1,100 cities, states and regions. Fully TCFD aligned, CDP holds the largest environmental database in the world, and CDP scores are widely used to drive investment and procurement decisions towards a zero carbon, sustainable and resilient economy. CDP is a founding member of the Science Based Targets initiative, We Mean Business Coalition, The Investor Agenda and the Net Zero Asset Managers initiative.

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