The Energy and Climate Challenges: EU Firms' Responses and implications

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Deep dive: How have firms responded to the energy and climate challenges?

1 Energy shock and priorities

2 Energy efficiency

3 Physical risks

4 Transition risks

5 Climate investment and plans

6 Obstacles and motivations

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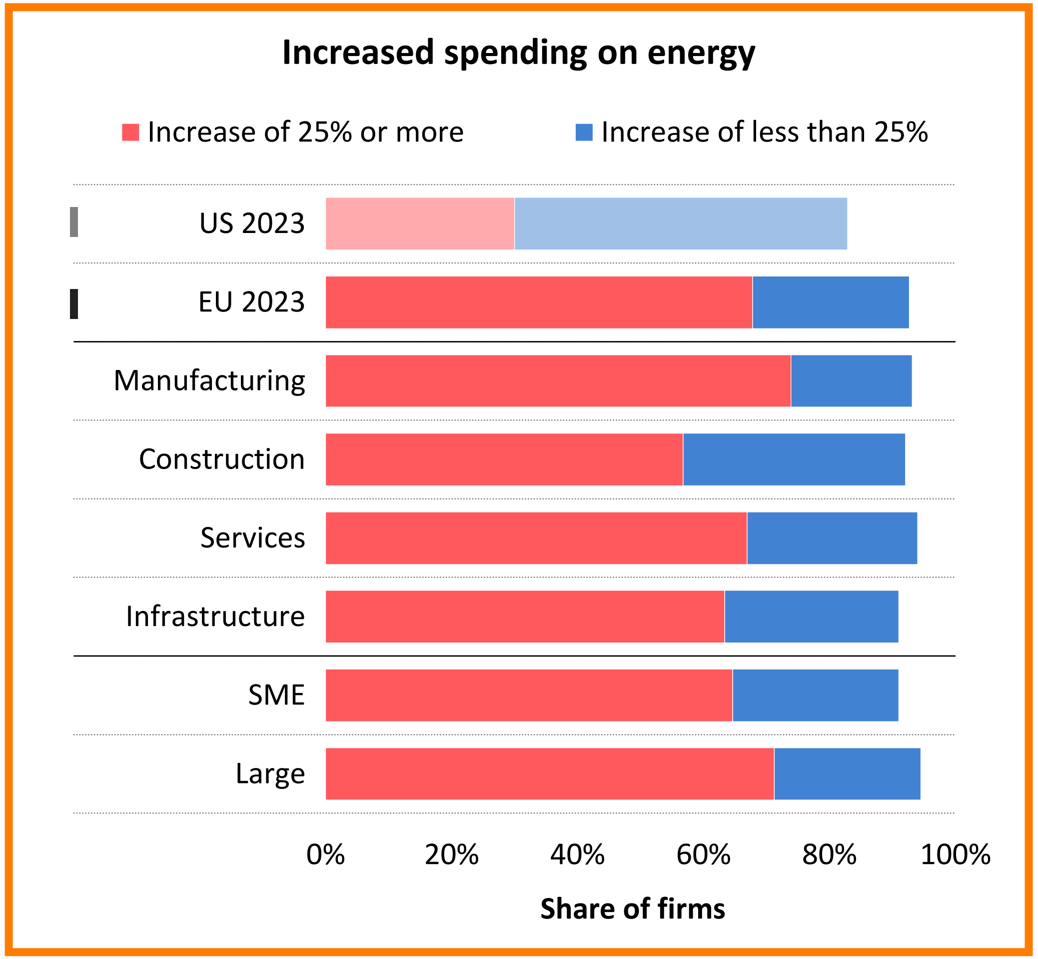
EU firms felt the revrberations of the energy shock strongly



- **68%** of EU firms faced an increase by 25% or more in their energy bill since the begining of 2022 vs. **30%** in the US.
- **+17 percentage points** was this difference between EU manufacturing and construction firms, suggesting assymetric impacts.
- **14%** of EU firms reported that their energy spending at least doubled.
- **A common challenge** for everyone given the small gap in the share of firms citing energy spending increases above 25% across EU countries.

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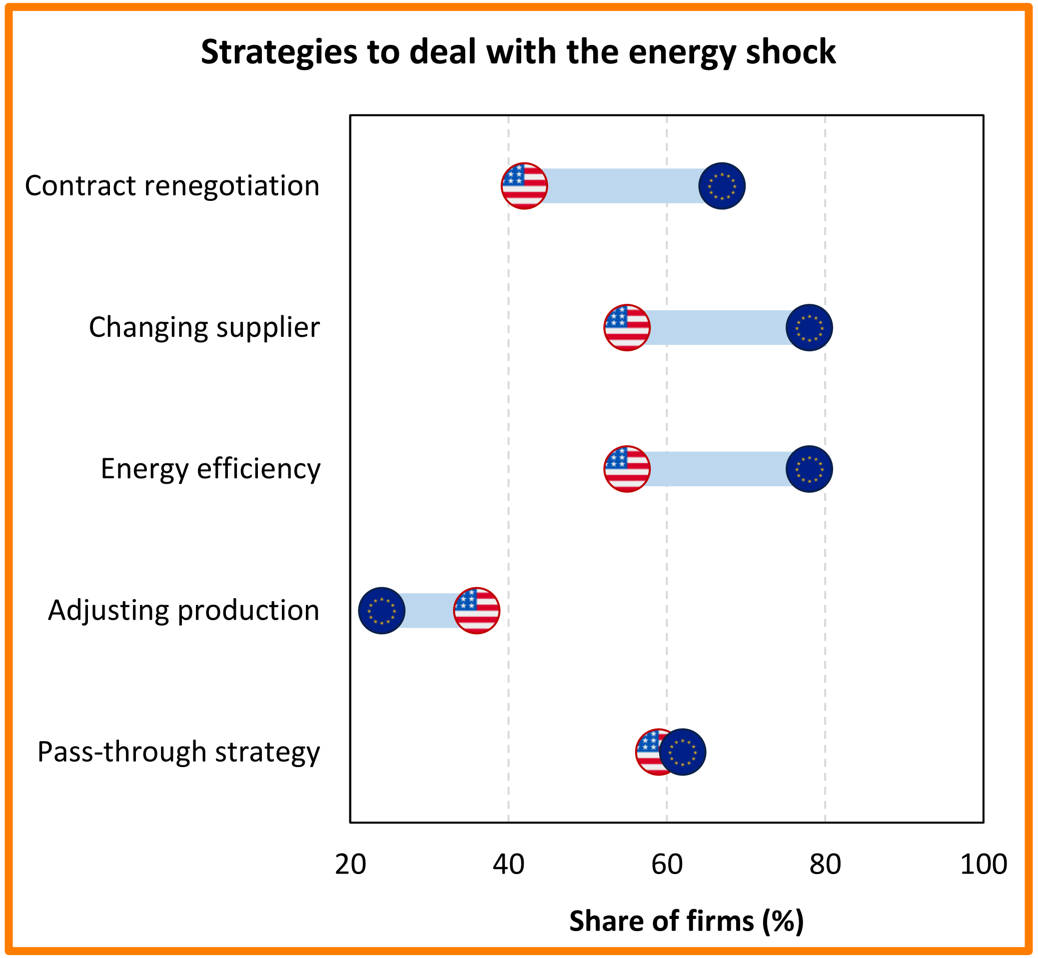
Q. Since the beginning of 2022, by how much has your company's spending on energy (including gas, electricity, oil) changed on average?

EU firms were more reactive to the energy shock than their US counterparts



- **Most EU firms** were concerned about the energy shock (96%) and had strategies to deal with it (95%).
- **72%** of EU firms prioritised investment in energy savings vs. **55%** in the US.
- At least **+25 percentage points** the difference between EU vs. US firms that aimed at changing their supplier or their fuel mix.
- **EU** and **US firms** were equally likely to pass on the additional energy cost to their customers.

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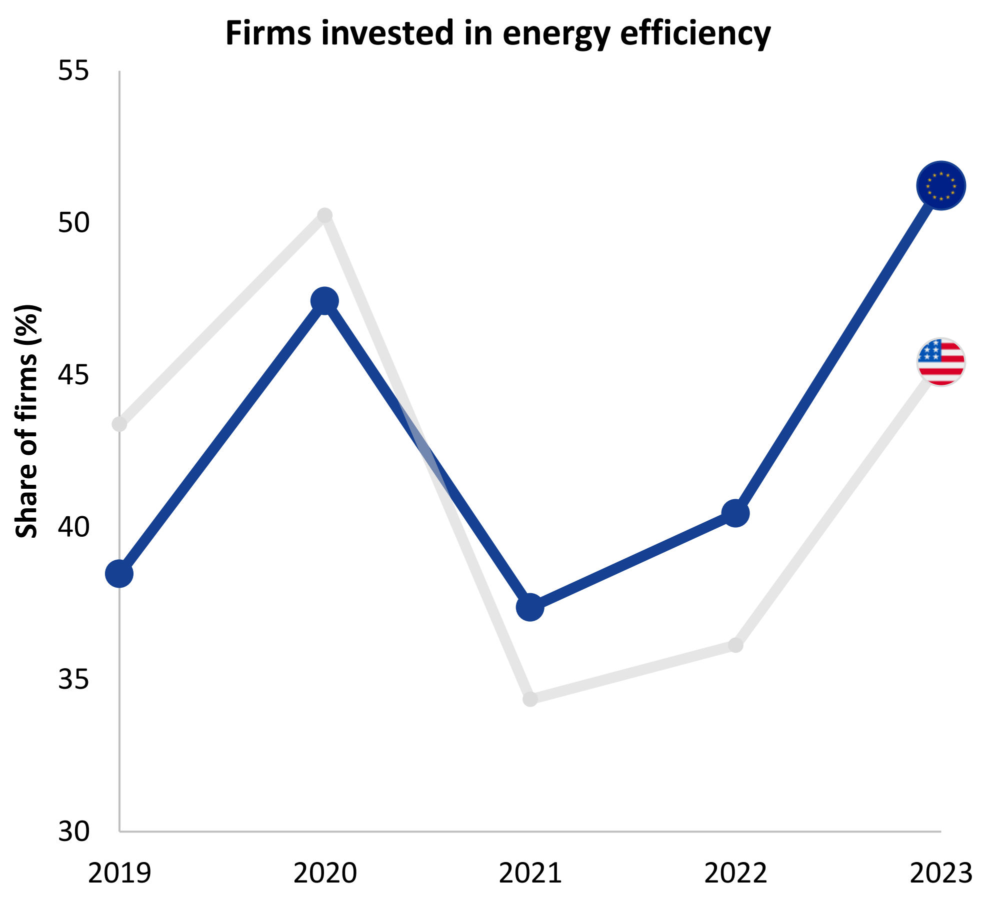
Q. Which, if any of the following, are your priorities/strategies to deal with the recent developments in the energy market?

As energy costs rose energy efficiency investments became more attractive



- **51%** of EU firms invested in energy efficiency in 2023.
- **+11 percentage points** increase from last year and well ahead of the US firms.
- **Manufacturing firms** led this trend in terms of share of firms investing in energy efficiency(60%), while **Construction** lags behind (30%).
- **12%** is the average share of investments that **EU firms** devoted to energy efficiency vs. **8%** in the **US.**
- **63%** of large firms invest in energy efficiency, while only **40%** of SMEs do so.

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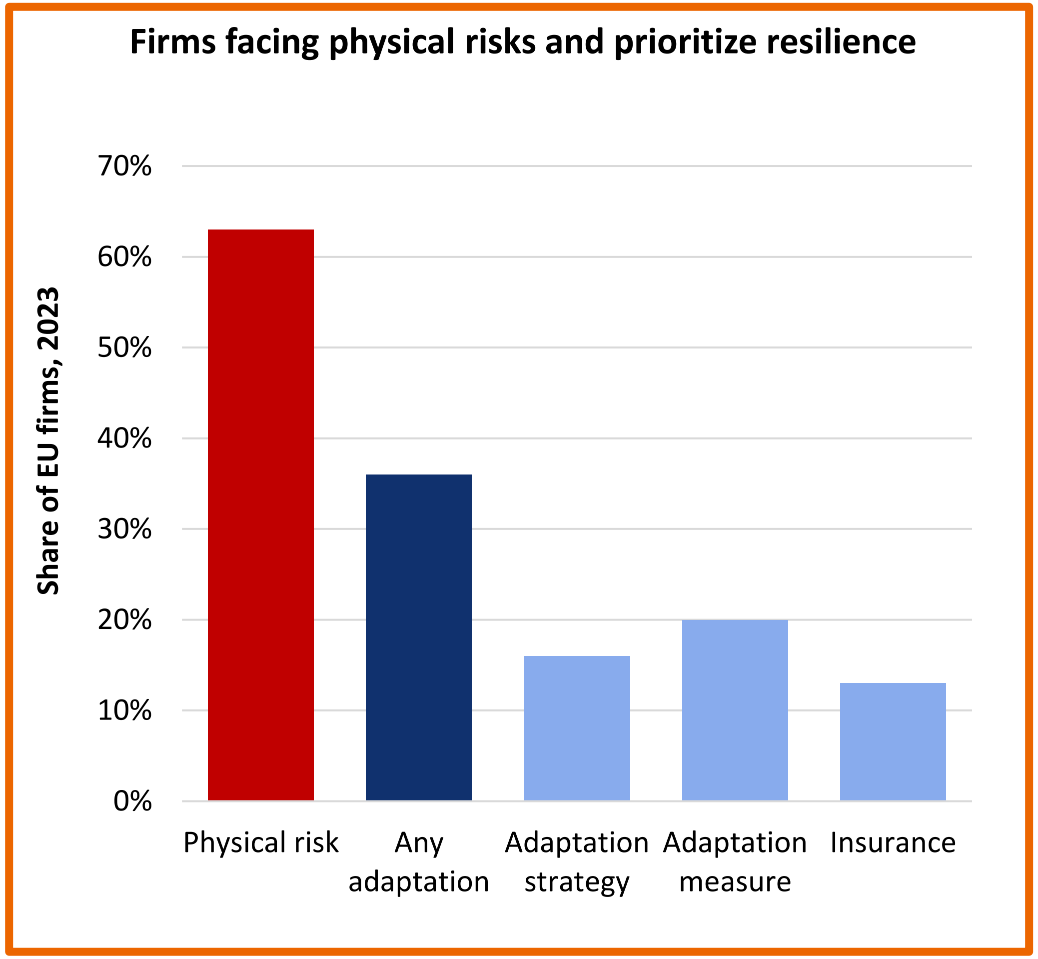
Q. What proportion of the total investment in the last financial year was primarily for measures to improve energy efficiency in your organisation?

More firms acknowledge physical risks, but few invest in resilience



- **+27 percentage points** is the gap between the share of EU firms facing physical risks and the share of firms taking up at least one adaptation measure.
- A **similar but increasing** share in the **EU** and in the **US** (63% and 67%, respectively) impacted by extreme weather events since EIBIS 2022.
- **Only 17%** of EU firms already facing climate risks are insured.
- **Public funds** and **access to finance,** among other factors, play a vital role in catalysing investment in adaptation.

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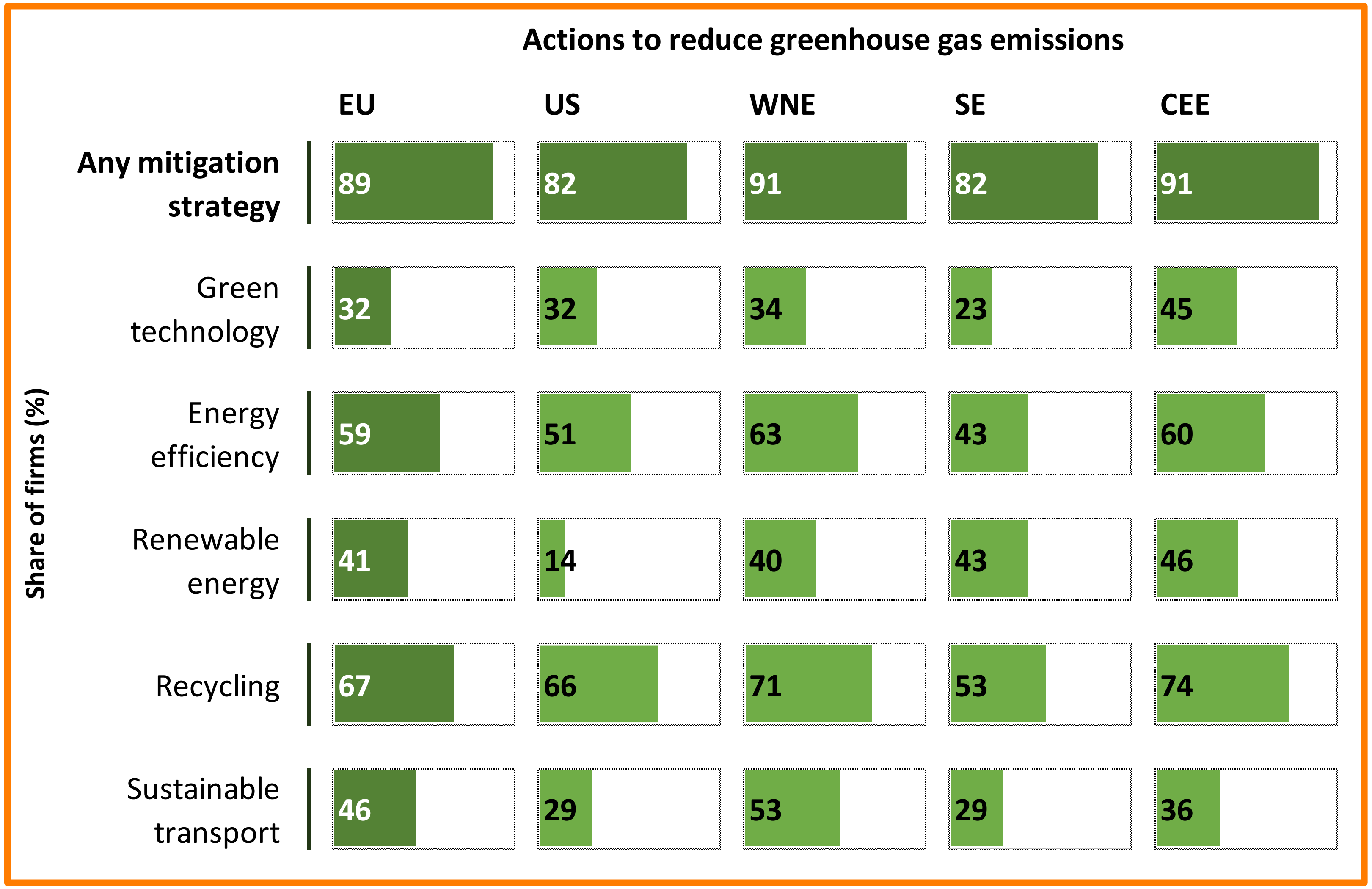
Q1. Thinking about climate change and the related changes in weather patterns, would you say these weather events currently have an impact on your business? Q2. Has your company developed or invested in any of the following measures to build resilience to the physical risks to your company caused by climate change?

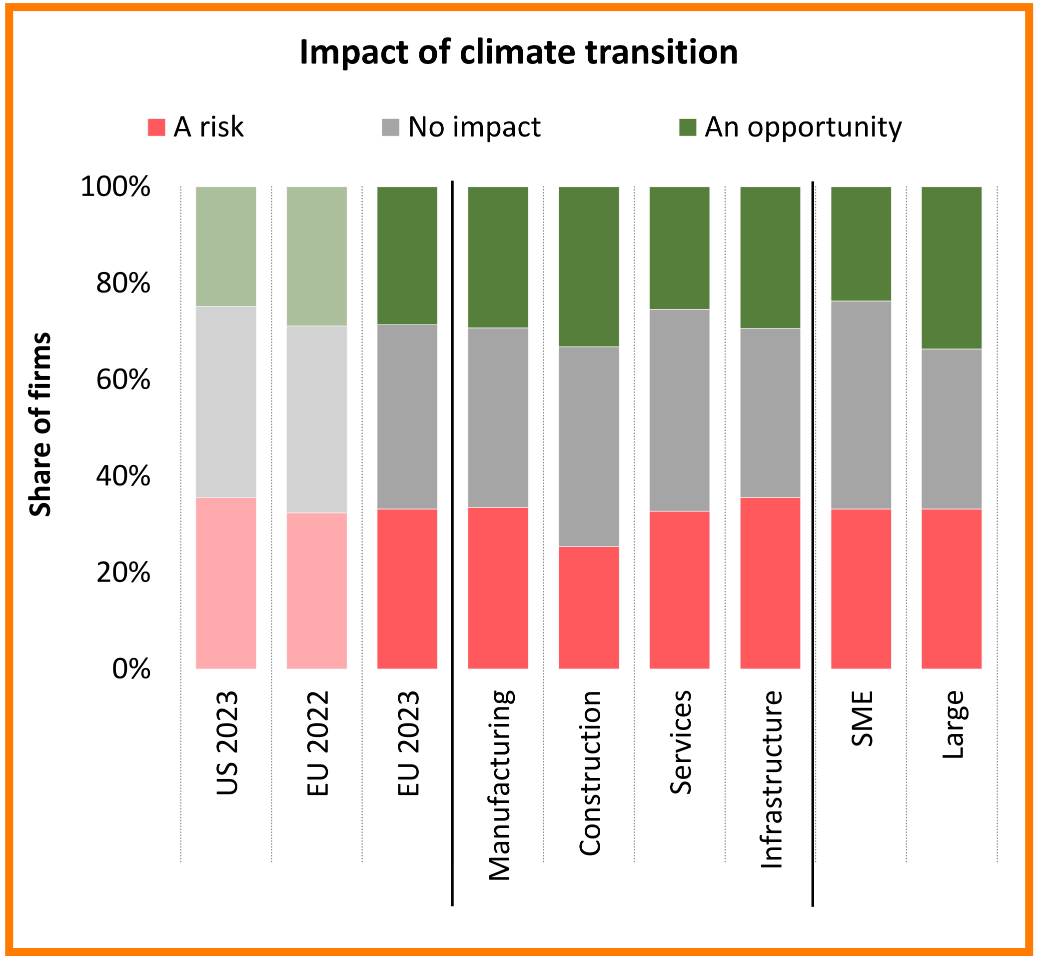
Firms focus more strongly on mitigation measures



- **89%** of European firms adopted at least one mitigation measure.
- **Recycling** and **energy efficiency** were the measures most frequently implemented.
- **Stark differences** between the **EU** and the **US** in renewables and sustainable transport adoption

Q. Is your company investing or implementing any of the following, to reduce greenhouse gas (GHG) emissions?

The climate transition sparks mixed feelings among firms



- **29%** of EU firms see the climate transition as an opportunity, while **33%** see it as a risk.
- **While** in the EU the views are broadly balanced, **US firms are the most pessimistic** (36% -negative vs. 25%-positive).
- **Energy-intensive firms** are more pessimistic about the transition than non-energy intensive firms.
- **40%** of EU firms set climate emissions targets vs. **10%** in the United States.

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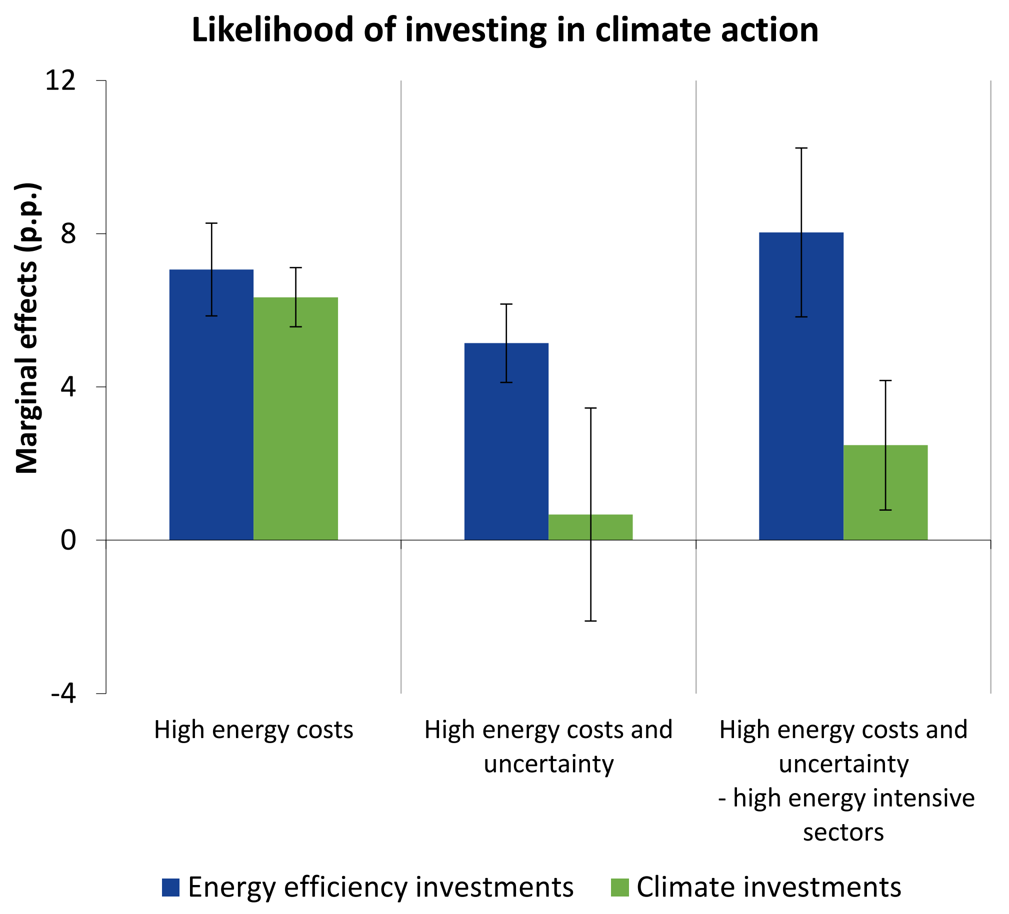
Q. Thinking about your company, what impact do you expect this transition to stricter climate standards and regulations will have on your company over the next five years?

Uncertainty is diluting firms' climate action and potential



- **Higher energy costs** increase the willingness of firms to invest in both energy efficiency and climate action.
- **Uncertainty** reduces firms' overall likelihood to invest, **favouring short-term solutions** at lowering energy costs over long-term strategies that mitigate climate risks.
- **Firms in energy-intensive sectors** invest more in climate action **regardless of uncertainty levels**.

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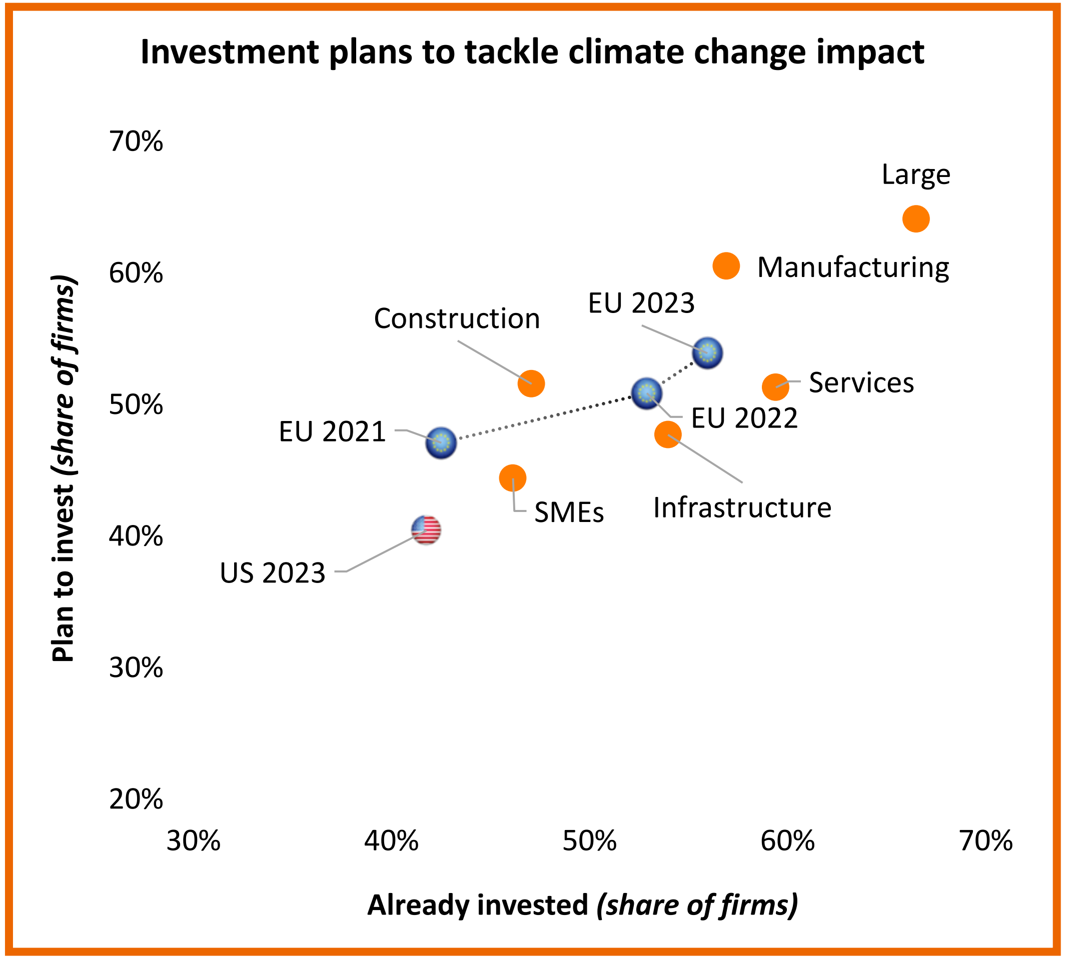
Note: Marginal effects of major energy cost concerns and uncertainty on the probability of investing in energy efficiency or in climate action, by energy intensity, after accounting for country, sector and size effects and various firm level control variables. The black lines represent 95% confidence intervals.

Firms are stepping up climate action despite challenges



- **56%** of EU firms have invested in climate adaptation and carbon reduction efforts, up from **53% in 2022**.
- **54%** plan to invest in these areas within the next three years, an increase from **51% in 2022.**
- **EU firms** are **more engaged** in climate action than their US counterparts.
- **Large firms** and **energy intensive sectors** are leading this trend.

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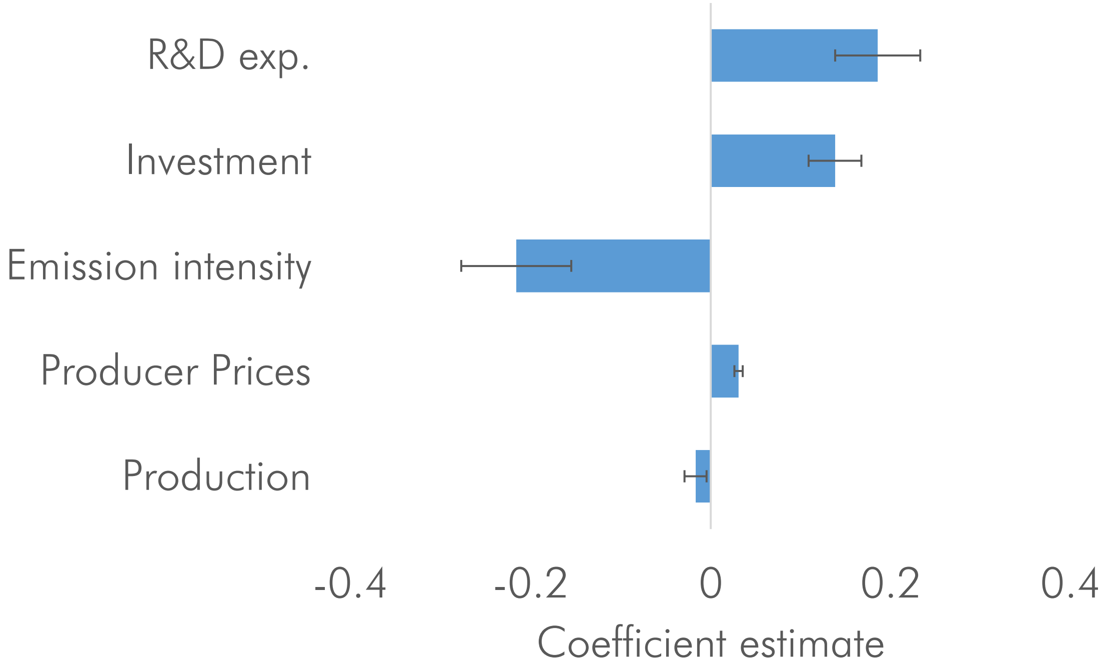
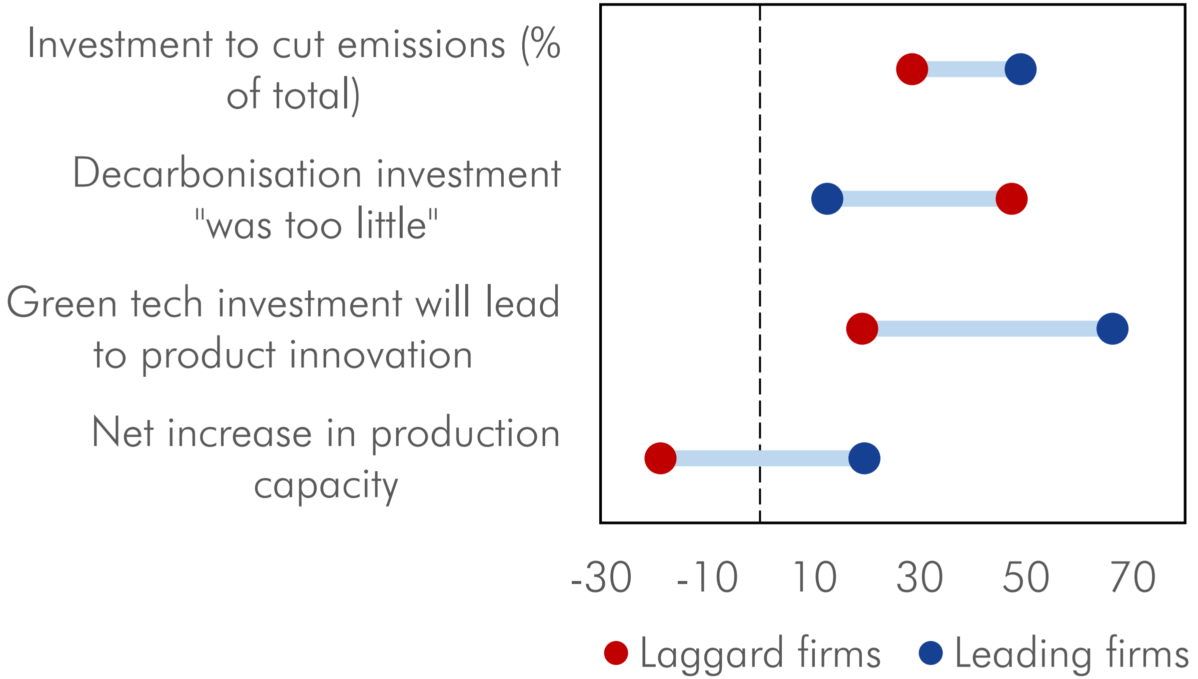
EIBIS 2022/2023: Q. Which of the following applies to your company regarding investments to tackle the impacts of weather events and to help reduce carbon emissions?

The tightening of the ETS is proving effective, but a decorbanization divide emerges

ETS tightening fosters decarbonization and transformation
(Impact of ETS prices, regression coefficients)



Leaders invest more, innovate more and do not reduce their production capacity
(% of firms)



90% of firms see price and regulation uncertainty as the main impediment to invest in green technologies

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Source: EIB Investment Report 2023-2024, based on sectorial data. Second graph, based on EIBIS ad hoc survey on ETS manufacturing

Concluding remarks….

- Energy price dynamics appear to be a double-edged sword
- EU firms face a twin energy and climate crises
- EU firms opt for mitigation measures than adaptation ones
- Growing uncertainty could prove to be a trap to investment decisions
- Challenges in managing the pitfalls and seizing the green opportunities
- Decarbonization divide calls for differentiated support policies

Thank you!

For any further information you can reach me via email at: F.kalantzis@eib.org

Annex

EIBIS background information

13,300 firms surveyed across EU27, plus the US and the UK (until 2021)

Firms of 5+ employees in Manufacturing, Services, Construction & Infrastructure sectors

Representative of the economy (firms weighted by value-added)

Information on:

- Firm characteristics and performance
- Past investment activities and future focus
- Investment finance
- Investment needs and constraints

More information at EIBIS Data Portal and this link: EIB Investment Survey (EIBIS)

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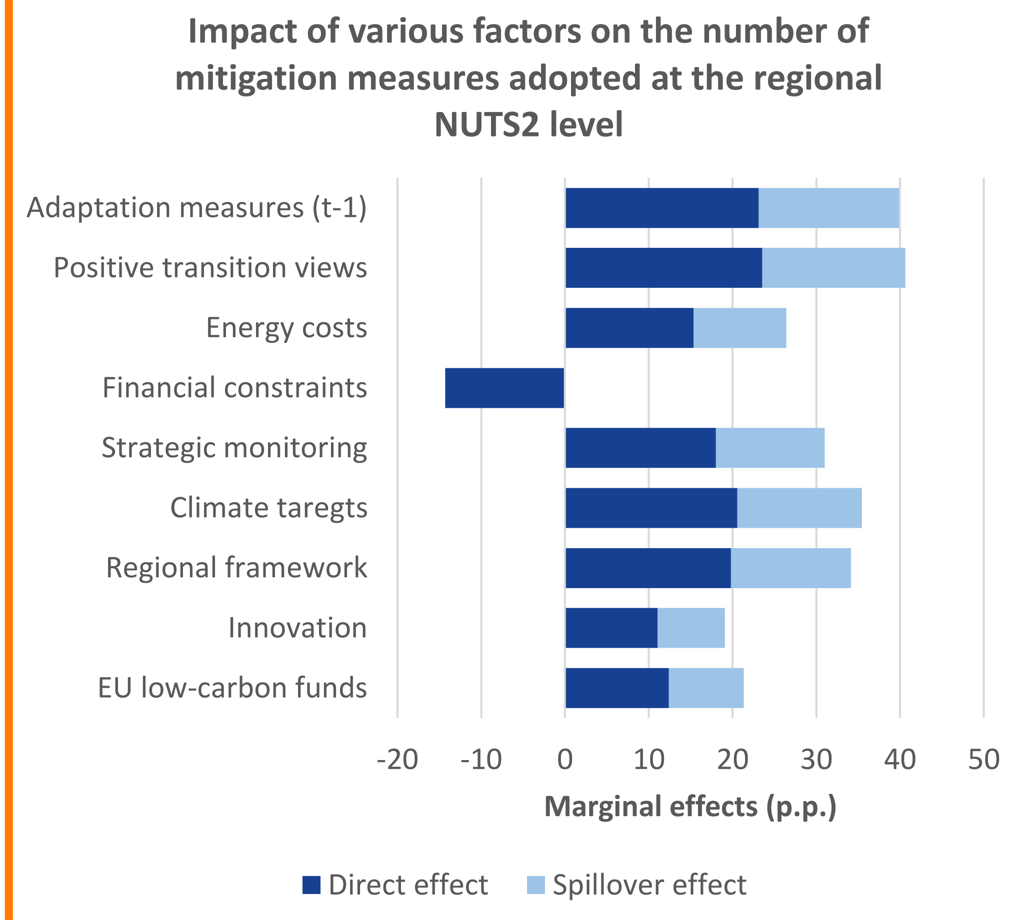
Awareness, institutional and economic factors matter for climate action



- **Adaptation** creates a **positive feedback loop** for **mitigation** (but not vice versa).
- Mitigation investment depend on **awareness of transition risks**, **energy costs burden** and **monitoring systems** implemented by firms both locally and in adjacent regions.
- Local impacts of **financial constraints**, no spillover effects on mitigation efforts.
- **Local economic** and **institutional conditions** and **EU funds** lift mitigation strategies across regions.

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Note: The graphs show the direct, indirect and total effects of different factors on firms' mitigation investments, based on spatial autoregressive (SAR) models. The graph only show the factors that are significant at 90% or more. The models account for the spatial dependence in the data, as indicated by the Morans' I and Lagrange Multiplier tests.