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# THE IMPACT OF MITIGATING CLIMATE CHANGE ON MALTESE FIRMS

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# THE IMPACT OF MITIGATING CLIMATE CHANGE ON MALTESE FIRMS[1]


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*This article examines how businesses in Malta, especially those in high greenhouse gas (GHG) intensive emitting sectors, perceive and respond to climate change and related policies. Drawing on a comprehensive survey conducted by the Central Bank of Malta (CBM), the study reveals relatively low levels of awareness among firms about climate change initiatives, such as the EU's Fit-for-55 package. The survey shows significant concerns about both physical and transition risks, with many firms anticipating substantial impacts on their operations. Despite acknowledging the importance of investing in green technologies and sustainable practices, many firms face challenges in securing the necessary financing for these initiatives. The article highlights the need for improved communication, education, and financial support to assist firms in transitioning to a sustainable economy. Enhancing awareness, facilitating access to financing, and incentivizing green investments are key to ensuring the resilience and competitiveness of Maltese businesses in a carbon-neutral future.*


## Introduction

Climate change poses a significant challenge to businesses worldwide, affecting their operations, financial stability, and long-term viability. This challenge is no less significant for firms in Malta. In 2023, the Central Bank of Malta conducted a comprehensive survey to understand how local firms, particularly those operating in GHG intensive sectors, perceive climate change and their mitigation strategies, since failing to act in a timely manner may induce competitiveness losses and increase regulatory costs. This article delves into some of the survey's key findings, examining climate awareness, risks, investment needs, and policy implications for Maltese businesses as they transition towards a more sustainable future.

> Physical risks, stranded assets and greater firm default risk expose the financial system to losses, which may impair the transmission of monetary policy. And the Eurosystem's balance sheet itself is exposed to climate risk from the assets we hold, notably through our asset purchase programmes. (Lagarde, 2021)

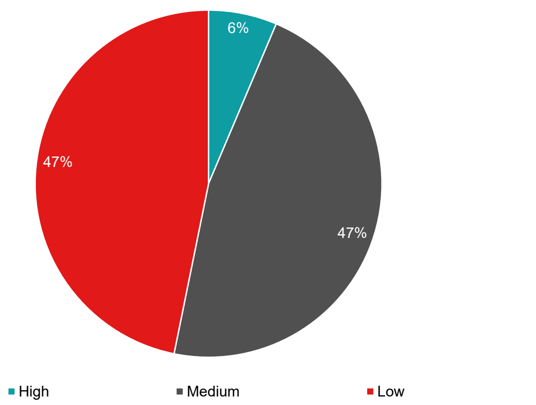
Moving towards a carbon-neutral economy, may bring inflationary pressures (e.g. via carbon tax – induced higher input prices, increased demand of raw materials needed for renewable energy, and restructuring of production systems) and necessitates substantial investments. Thus, understanding the perspectives and preparedness of local firms becomes crucial for effective policy formulation and economic planning since both the physical risks of climate change and the risks associated with mitigation efforts have significant implications for central banks in maintaining price stability as well as for regulators whose objectives are financial stability and banking supervision.


[1] The author would like to thank Mr Alexander Demarco, Dr Aaron Grech, Ms Rita Schembri, Mr Noel Rapa, Mr Ian Borg and Dr Massimo Giovannini for their helpful comments. The views expressed in this paper are those of the author and do not necessarily reflect those of the Central Bank of Malta. Any errors are the author's own.

## Characteristics of surveyed firms

The survey adopts a controlled quota sampling framework which is a non-probability sampling method, where individuals are chosen according to specific traits or qualities. In this case, the survey considers firms that are likely to have the most emission-intensive activities. This is determined by simply scaling the firms' respective sector's GHG emissions relative to the sector's own gross value added.[2] The survey focuses on firms operating in high and mid-GHG intensive emitting sectors and excludes micro enterprises, to provide a snapshot of relevant entities most likely to be impacted by climate change mitigation efforts.[3] The sectoral distribution counts 24% of firms in manufacturing, 33% in services, 34% in wholesale and retail, and 9% in construction and real estate. More than half of the firms in the sample have been in operation for over three decades, indicating a significant prolonged presence in the Maltese economy. Annual revenue varied, with 41% of firms reporting revenues between €10-€50 million and 13% exceeding €50 million. The remaining 46% register less than €10 million in annual revenues. In terms of employment, 67% of the firms had between 50-249 employees, indicating that a considerable portion of the workforce is actively engaged in these sectors. Overall, we argue, our sample accurately represents the population of well-established and economically impactful businesses, providing a robust basis for understanding the broader economic implications of climate change and mitigation risks.

**Chart 1**
**ENVIRONMENTAL AWARENESS IN MALTA**
*(percentage of firms)*

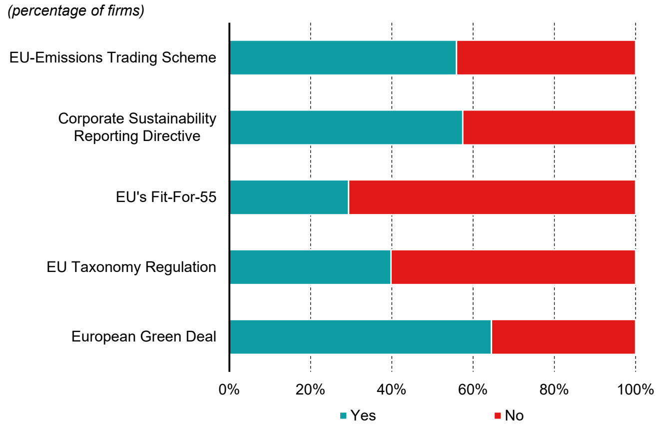



Sources: CBM survey on "Mitigating Climate Change and its Impact on Malta's Highest GHG Intensive Sectors" and author's calculations.

## Awareness of climate change and related initiatives

The survey revealed that Maltese firms have different levels of awareness about climate change and related EU directives. Notably, 47% of respondents, felt that environmental awareness in Malta remains low (see Chart 1). This sentiment extends to specific initiatives, with 70% of firms unaware of the EU's Fit-for-55 package, a cornerstone of the European Green Deal aimed at reducing GHG emissions by 55% by 2030 (see Chart 2). While awareness levels were higher among firms in high-GHG intensive emitting sectors compared to their mid-GHG counterparts, only 49% of all firms understood the direct impact these EU initiatives would have on their

**Chart 2**
**COMPANY AWARENESS OF EU INITIATIVES**
*(percentage of firms)*




Sources: CBM survey on "Mitigating Climate Change and its Impact on Malta's Highest GHG Intensive Sectors" and author's calculations.

2 See Deguara, et al., (2024).

3 Micro firms are those which employ less than ten workers.

operations. This indicates a pressing need for improved communication and education on climate-related policies and their implications for the business sector.

*"Notably, 47% of respondents, felt that environmental awareness in Malta remains low"*

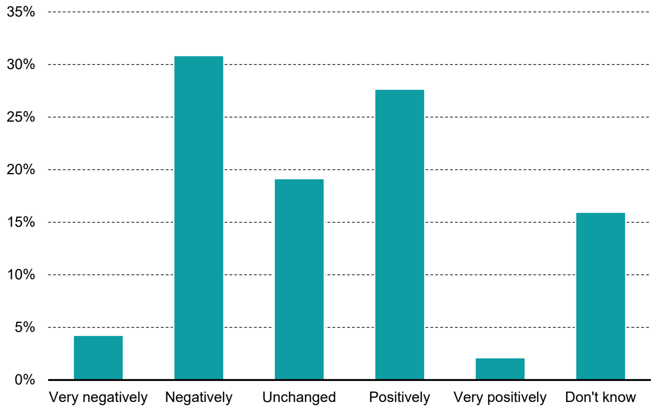
## Transition and physical risks

Transitioning to a low-carbon economy presents both risks and opportunities for businesses. The survey found that 31% of firms anticipated a negative impact from this transition, while 28% expected a positive impact, mirroring the latest European Investment Bank (EIB) investment survey results (2023) (see Chart 3). This heterogeneity in perception aligns with broader European trends, where firms grapple with the uncertainties and challenges of shifting to sustainable practices. Transition risks include regulatory changes, market shifts, and most importantly, technological advancements, all of which can profoundly affect business operations. In this evolving business environment, firms must carefully navigate these risks while seizing opportunities to innovate and maintain competitiveness.

*"The survey found that 31% of firms anticipated a negative impact from this transition, while 28% expected a positive impact"*

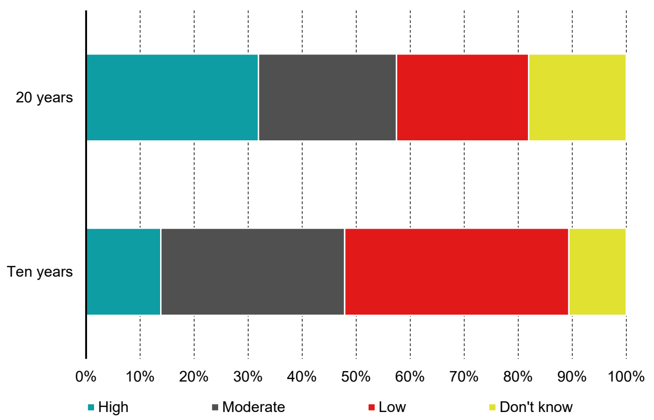
The physical risks of climate change are a serious concern for Maltese firms. Nearly 50% of respondents anticipated moderate to high impacts on their operations in the next decade, a figure that increases to 60% when looking at a 20-year horizon (see Chart 4). These risks include extreme weather events, rising sea levels, and temperature fluctuations, all of which can disrupt supply chains, damage infrastructure, and potentially increase operational costs. Despite these challenges, many firms see opportunities in adopting alternative energy sources and accelerating digitalization. An overwhelming 85% of firms anticipate that climate change will drive the adoption of alternative energy sources, while 75% see it as a catalyst for digital transformation

**Chart 3**
**IMPACT OF THE TRANSITION TO A CARBON NEUTRAL ECONOMY**
*(percentage of firms)*




Sources: CBM survey on "Mitigating Climate Change and its Impact on Malta's Highest GHG Intensive Sectors" and author's calculations.

**Chart 4**
**PROBABILITY OF BEING IMPACTED BY PHYSICAL RISKS**
*(percentage of firms)*

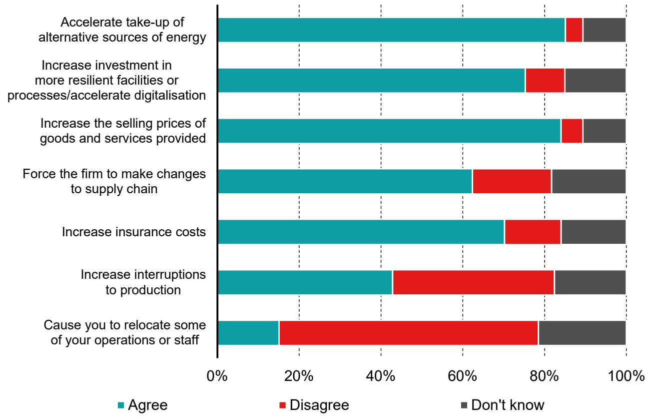



Source: CBM survey on "Mitigating Climate Change and its Impact on Malta's Highest GHG Intensive Sectors" and author's calculations.

(see Chart 5). These insights suggest that although firms are aware of the risks, they are also strategically positioning themselves to capitalize on the opportunities that arise from adapting to a changing climate.

*“The physical risks of climate change are a serious concern for Maltese firms. Nearly 50% of respondents anticipated moderate to high impacts on their operations in the next decade, a figure that increases to 60% when looking at a 20-year horizon”*

**Chart 5**
**CLIMATE CHANGE AND/OR ADAPTATION TO IT WILL:**
*(percentage of firms)*




Sources: CBM survey on "Mitigating Climate Change and its Impact on Malta's Highest GHG Intensive Sectors" and author's calculations.

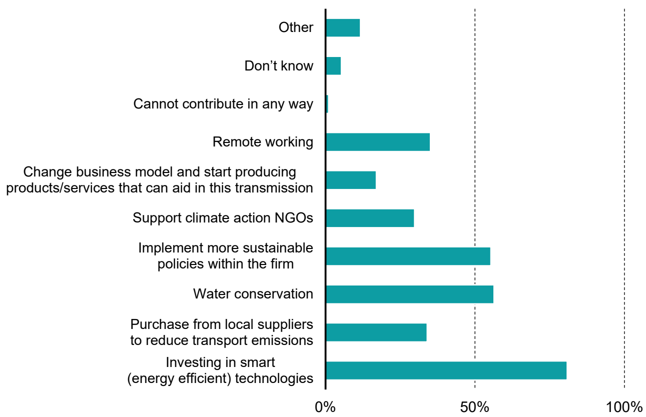
## Investment and financing

Investment in green technologies and sustainable practices is crucial for mitigating climate change impacts. Over 80% of surveyed firms acknowledged the need for investing in new technologies as well as in existing systems to achieve sustainability goals.[4] Energy-efficient technologies were prioritized by 81% of firms, while water conservation and sustainable policies were emphasized by 56% and 55%, respectively (see Chart 6).

*“Energy-efficient technologies were prioritized by 81% of firms, while water conservation and sustainable policies were emphasized by 56% and 55%, respectively”*

When asked about the most likely repercussions of under-investment in such measures, firms mainly mentioned increased regulatory costs, high energy prices, competitiveness losses and an overall negative perception of the firm. As such, according to the survey, 67% of firms reported that they have already started to implement some sort of mitigation measure. Despite recognizing the importance of these investments, firms face significant challenges in financing them. A striking 72% lack a recurring budget dedicated to green investments, and about 80% allocated less than 20% of their total investment in the last

**Chart 6**
**CONTRIBUTION TO A CARBON NEUTRAL ECONOMY**
*(percentage of firms)*

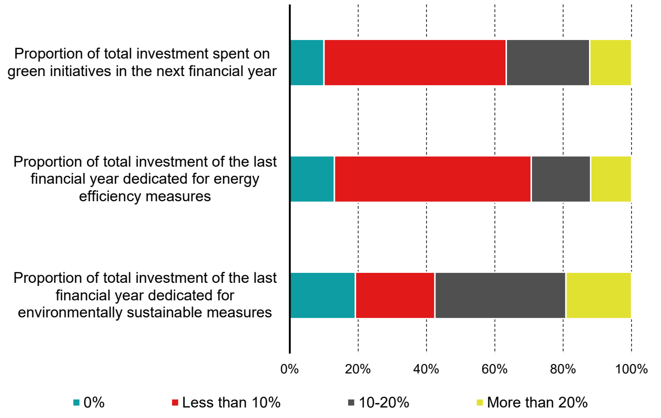



Sources: CBM survey on "Mitigating Climate Change and its Impact on Malta's Highest GHG Intensive Sectors" and author's calculations.

[4] For more information see (Deguara, et al., 2024).

financial year to either environmentally sustainable measures or energy efficiency measures (see Chart 7).[5] At the same time only 36% of firms have utilized grants or schemes available for these purposes. These findings align with the *EIB Investment Report* (2023) and highlight a considerable gap in accessing the financial resources necessary for a sustainable transition. Furthermore, future investments in green initiatives are expected to remain below 20% of total investment for most firms, underscoring the need for enhanced financial support mechanisms and incentives.

**Chart 7**
**PROPORTION OF TOTAL INVESTMENT FOR GREEN INITIATIVES**
*(percentage of firms)*




Sources: CBM survey on "Mitigating Climate Change and its Impact on Malta's Highest GHG Intensive Sectors" and author's calculations.

*"A striking 72% lack a recurring budget dedicated to green investments, and about 80% allocated less than 20% of their total investment in the last financial year to either environmentally sustainable measures or energy efficiency measures"*

Despite the high availability of grants, their coverage across Maltese firms is low, showing opportunities to enhance financing accessibility. Firms have identified areas for improving the transition process including increasing grants and tax incentives, providing professional assistance, reducing bureaucratic hurdles and simplifying access to funding promoting the availability of funding streams, advisory services and government schemes. Additionally, incentives should be offered to large corporations and not just SMEs.

## Conclusion

The findings from this survey point to several key policy recommendations to support Maltese firms in their transition to an environmentally sustainable economy. Firstly, enhancing awareness is critical. A concerted effort is needed to educate firms about climate change initiatives and their implications, ensuring they are well-informed and prepared to act. Secondly, facilitating financing for green investments is essential. This could involve improving access to grants and financing schemes, reducing bureaucratic hurdles, and providing professional assistance to help firms navigate the funding landscape. Incentivizing investments through tax breaks, subsidies, and other financial incentives can further encourage firms to adopt sustainable practices. Lastly, fostering innovation by supporting the development and adoption of new technologies that reduce emissions and enhance efficiency is vital for long-term sustainability.

The survey provides valuable insights into the impact of climate change mitigation on Maltese firms. While awareness and investment in sustainability are increasing, significant gaps remain in financing and policy support, and the transition process is likely to be challenging due to expected increases in selling prices. Addressing these challenges requires a collaborative effort among businesses, policymakers, and financial institutions to create a more sustainable business environment. By raising

[5] Some figures can not be matched to the charts in this Article. These figures are a preview of an ongoing study which is to be published at a later date.

awareness, facilitating financing, and incentivizing sustainable investments, firms could thrive in a carbon-neutral future. This approach would not only benefit the environment but also strengthen the resilience and longer-term competitiveness of the Maltese economy in the face of global climate challenges.

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