

BANK ĊENTRALI TA' MALTA
EUROSISTEMA
CENTRAL BANK OF MALTA

THE IMPACT OF MITIGATING CLIMATE CHANGE ON MALTESE FIRMS

Article published in the Quarterly Review 2024:3, pp. 60-65

BOX 3: THE IMPACT OF MITIGATING CLIMATE CHANGE ON MALTESE FIRMS¹

Climate change is one of the most pervasive global challenges with implications for central bank's core task of monetary policy. Extreme weather events have been increasing recently, and any delay in tackling climate issues, including global temperature increases, may trigger irreversible damage. Failing to act in a timely manner may also induce competitiveness losses and regulatory costs for firms. At the same time, global adaptation and mitigation efforts will require an unprecedented scaling up of investment.²

EU member states have bound themselves to reduce net greenhouse gas (GHG) emissions by at least 55% by 2030, compared to 1990 levels. The EU also aims to achieve climate neutrality by 2050. To this end, the 'Fit for 55' package expands the emissions trading system (ETS), sets more ambitious emission reduction targets in sectors not covered by the ETS, and establishes new standards for international co-ordination in this area.³

This box assesses how Maltese firms plan to address the changes brought about by climate change, and the impact that mitigation policies may have on their operations from the lens of a survey with non-financial companies (NFCs) in Malta carried out by the Central Bank of Malta. The survey also collects information regarding firms' awareness of issues surrounding the impact of climate change, and the risks this poses for their activity.

The survey employed a quota sampling framework, targeting non-micro firms likely to engage in the most emission-intensive activities. The methodology classified sectors into high, mid, and low GHG emissions intensity by scaling each sector's GHG emissions by the sectors' own GVA. Only high and mid-GHG intensive emitting sectors were targeted, resulting in a population of 2,095 companies. Of these, 94 firms were selected such that the final target sample is broadly equally assigned to High and Mid-GHG intensive emitting sectors. The selection also closely mirrors each sector's classification of GHG emitting intensity. The list of firms was obtained from the NSO's Business Register.⁴

Climate change awareness

The transition towards a sustainable economy requires a clear regulatory framework, climate awareness, and investments. Awareness differs across regions and firm characteristics, with Maltese firms generally less aware of transition risks, and investing less in climate-related projects compared to EU averages.⁵

¹ Prepared by Mr Warren Deguara, Principal Economist within the Economic Projections and Conjunctural Analysis Office. The views expressed are those of the author and do not necessarily reflect the views of the Central Bank of Malta. Any remaining errors are the sole responsibility of the author.

² According to European Commission estimates, an additional €620.0 billion per annum needs to be invested for the EU to meet the Green Deal objectives by 2030. For further details, see the [April 2024 intermediate report](#) by the EU Platform on Sustainable Finance.

³ For further details, see [Fit for 55 initiative](#).

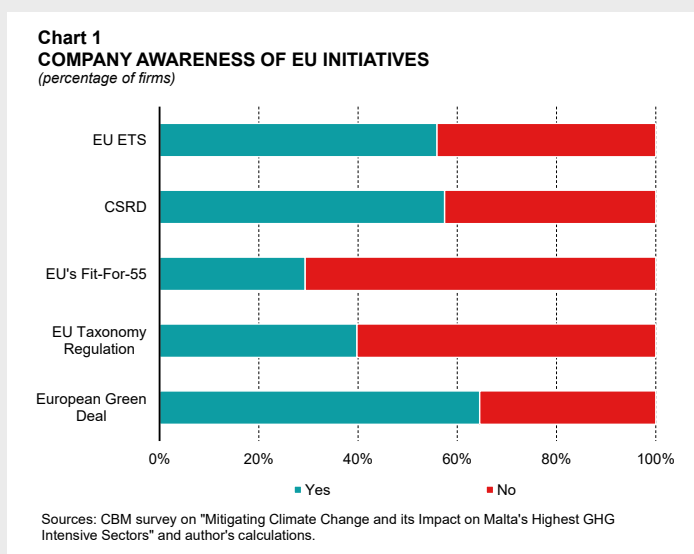
⁴ The NSO's Business Register contains reference data on all Malta registered entities and sole traders. The BR is used both by the NSO and the Central Bank of Malta (CBM).

⁵ See [European firms and climate change 2020/2021: Evidence from the EIB Investment Survey](#), European Investment Bank, 2021.

The Bank's survey also suggests that the level of environmental awareness and familiarity with specific EU initiatives among firms in Malta is low.

The survey specifically asked respondents to indicate their assessment of general environmental awareness in Malta. Around 47% of respondents view environmental awareness in Malta as low, with another 47% considering it medium. Only 6% view it as high.

The survey also reveals that there is significant variation in firms' awareness of EU initiatives such as the European Green Deal, Fit-for-55 package, and the EU Taxonomy Regulation. Most respondents were aware of the European Green Deal (65%), the Corporate Sustainability Reporting Directive (CSRD) (57%), and the EU ETS (56%) (see Chart 1). However, awareness of Fit-for-55 and the EU Taxonomy Regulation was notably low, with only 29% and 40%, respectively, indicating awareness about these initiatives. Firms in high-GHG intensive emitting sectors were more aware of the CSRD, the EU Taxonomy Regulation, and the European Green Deal than those in mid-GHG sectors, but both sector groups showed low awareness of Fit-for-55.



Most firms (52%) were uncertain about the impact of climate-related EU initiatives on their business, while 27% anticipated positive effects (mainly from high-GHG sectors and manufacturing and services sectors). Conversely, 14% expected a negative impact, and 8% anticipated no impact. These findings mirror those found in a recent report by the European Investment Bank.⁶

Impact of climate change on businesses

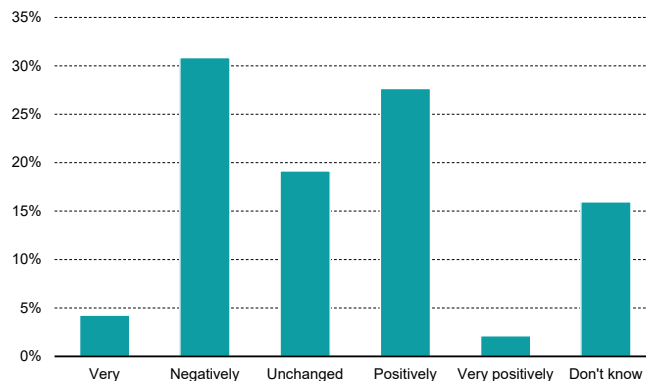
The survey examines how local firms in Malta expect climate change to impact their business, focusing on transition and physical risks. It sheds light on firms' perceptions of risks related to the transition to a low-carbon economy, physical risks associated with climate change, and how they expect to adapt their operations.

Transition risks arise from the process of moving to a low-carbon economy. About one-third of surveyed firms expect negative impacts from transitioning to a low-carbon economy,

⁶ See [What drives firms' investment in climate action? - Evidence from the 2022-2023 EIB Investment Survey](#), European Investment Bank, 2023.

with most of these firms operating in mid-GHG intensive emitting sectors (see Chart 2). A small percentage (4%) foresee a very negative impact, primarily within high-GHG intensive sectors such as wholesale and retail and services. Comparatively, around 28% expect a positive impact from the transition, particularly those in high-GHG intensive sectors, while 2% expect a very positive effect.

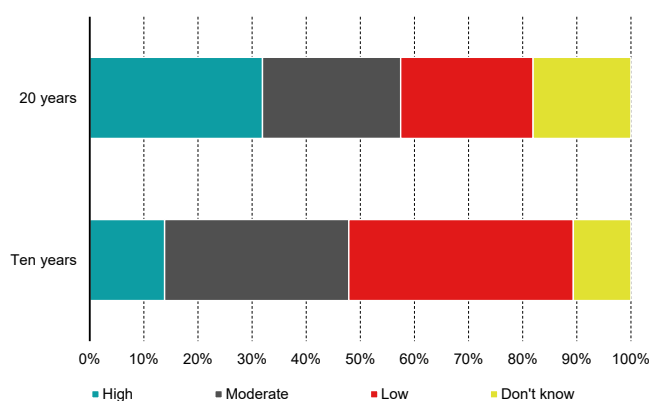
Chart 2
IMPACT OF THE TRANSITION TO A CARBON NEUTRAL ECONOMY
(percentage of firms)



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

Physical risks relate to the direct impacts of climate change on infrastructure, production, and the population. A significant share of respondents (41%) anticipate only a low impact from physical risks over the next decade, while a third expect a moderate impact (see Chart 3). A smaller portion (14%) foresee a high impact from physical risks.

Chart 3
PROBABILITY OF BEING IMPACTED BY PHYSICAL RISKS
(percentage of firms)



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

When asked about the longer-term impact over 20 years, the share of firms expecting a high impact doubles, suggesting increased concern about climate change's effects over time.

Companies were asked more specifically on how climate change will impact their operations, as well as how they plan to adapt their business in view of the related transition and physical risks.

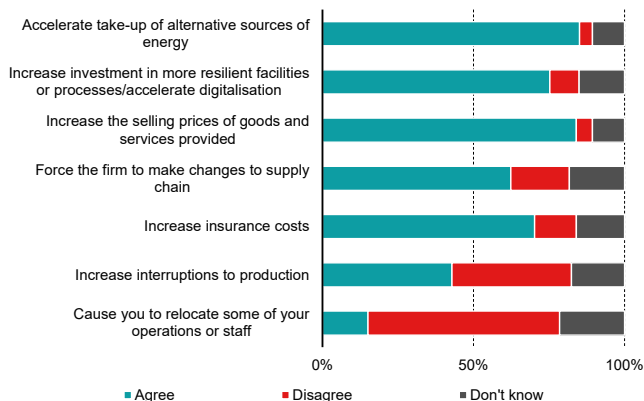
Overall, most firms expect climate change to significantly affect their business practices (see Chart 4). A significant majority (between 60% and 80%) expect to make changes to their supply chain, and incur higher insurance costs. They also plan to increase investment in more resilient facilities or processes and accelerate digitalisation. More than 80%

of respondents believe that climate change will accelerate the adoption of alternative energy sources, and to contribute to higher selling prices.

On the other hand, firms are divided on the impact of climate change on production disruptions. While 43% of firms anticipate potential production interruptions, around 40% do not, and a fifth are unsure. Moreover,

63% of firms do not expect to relocate operations or staff due to climate change. Only 15% of respondents, mainly operating in the trade and services sectors, entertain this idea.

Chart 4
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.

The survey also asked firms to rank various challenges related to climate change adaptation from 0 to 5 (0 indicating no challenge and 5 indicating a significant challenge). Over half of firms (52%) ranked technological availability as a medium-significance challenge, while 8% see it as a significant challenge. Costs are seen as a significant or very significant challenge by 58% of firms. An overwhelming majority also noted that regulations and legislation are a challenge, with 28% classifying it as very significant, and another 31% as significant.

Competitiveness, the need for new skills, and the cultural and political environment were of lesser concern. Around 38% of those surveyed stated that retaining competitiveness was a significant or very significant challenge. Firms were somewhat divided on whether new skills are a significant challenge, with only 4% deeming it not a challenge, and 14% seeing it as very significant. Moreover, firms believe that the lack of incentives poses a challenge, with 22% viewing it as a very significant challenge, and 28% as significant. Lastly, 43% classified the cultural and political environment as a medium-significance challenge, while 50% see it as a significant or very significant challenge.

Impact of mitigating climate change on firms' production and market structure

Efforts to reduce GHG emissions could translate into new operating costs but could also create opportunities for growth and innovation. Therefore, the survey explored how mitigating climate change impacts firms' market structure, prices and costs, and investment.

Firms hold mixed views on whether mitigating climate change will make production less labour-intensive. Most companies disagree with this notion. The majority of firms (60%)

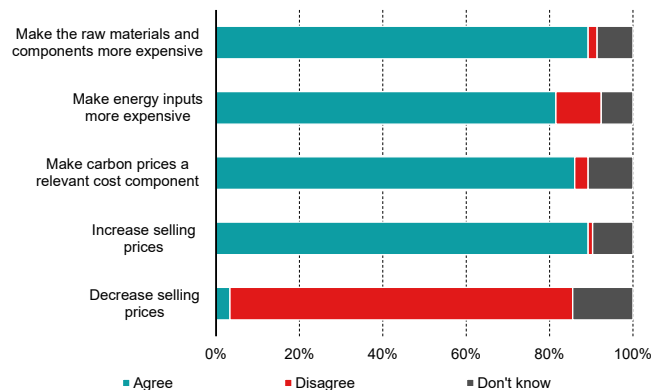
expect market concentration to increase as not all companies can transition to zero emissions. This view is more prevalent in real estate and construction firms, manufacturing, and service sectors. At the same time, half of the firms believe that climate change mitigation will facilitate new entrants with knowledge of required technologies.

Firms had varied views on whether climate change mitigation will encourage a shift towards more local supply chains. High emissions sectors and manufacturing firms are more likely to anticipate a shift towards local suppliers than medium emission ones. Nonetheless, most firms (80%) expect that mitigating climate change will require renegotiation with suppliers or finding new ones to decarbonize inputs. A high share of companies (41%) expect that mitigating climate change will encourage a move to markets where transition costs are lower. Firms in mid-GHG intensive emitting sectors tend to agree more with this statement than those in high-GHG sectors.

About 90% of firms expect climate change mitigation to increase the cost of raw materials and components, and around 80% expect energy inputs and carbon prices to become more expensive, (see Chart 5). Consequently, the vast majority of firms expect climate change mitigation to force them to increase selling prices.

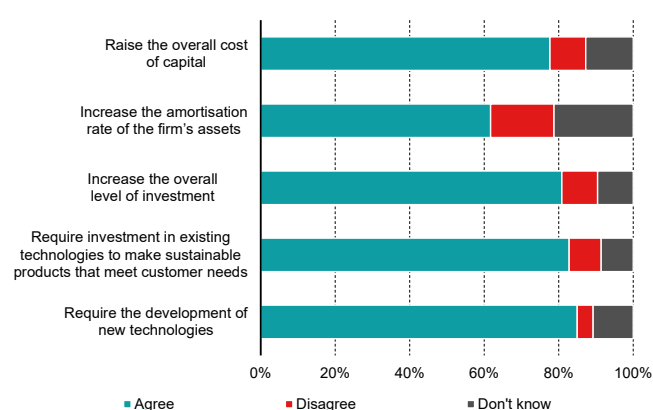
Mitigation efforts include those related to investments. Most firms (78%) believe mitigating climate change will raise the cost of capital (see Chart 6). This view was more prevalent among mid-GHG intensive emitting sectors. Nevertheless, a similar share of firms (81%) believe that mitigating climate change will increase overall investment levels

Chart 5
IMPACT ON PRICES AND COSTS – MITIGATING CLIMATE CHANGE 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.

Chart 6
IMPACT ON INVESTMENT – MITIGATING CLIMATE CHANGE 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.

and nearly all firms agree that it will require investment in more sustainable products and the development of new technologies. Firms recognize the risks of not investing in green initiatives and these include regulatory penalties and fines, higher energy costs, loss of market share, and negative impacts on profitability and competitiveness. Companies reported that clients are increasingly considering a firm's approach to sustainability when making business decisions, impacting a company's reputation and business opportunities. Moreover, a lack of green investments could result in challenges in obtaining loans or favourable terms from financial institutions. Around 62% of firms agree that climate change mitigation will increase amortization rates of assets, with agreement higher among real estate and construction firms.

Main conclusions from the survey

In conclusion, Maltese firms are navigating a complex landscape in their efforts to mitigate climate change. Limited awareness of EU climate-related initiatives restricts their engagement with necessary sustainability practices. Moreover, the prevailing perception among local firms seems to be that climate change will have more significant impact in the long-term rather than in the immediate future. This might lead to delayed mitigation actions. Nevertheless, firms acknowledge that the physical and transition risks from climate change will require added investment and will also affect operations, in particular the organisation of production, and market power.

Survey analysis comes with its limitation which in the case of this study mainly relate to the sampling method used. With quota sampling it is difficult to generalise the findings to the entire population, even though the characteristics of the sample were chosen to resemble those of the target population. Because of this methodology, the sample over-represents manufacturing firms and under-represents accommodation and food services firms. Another limitation relates to data quality due to the complexity and length of the survey. This might have impinged on the quality of some of the responses.

Preparing for the transition in a timely manner requires additional resources to increase awareness as well as the mobilisation of financial resources. The transition can be facilitated by making use of NextGenerationEU (NGEU) funds, notably the Recovery and Resilience Facility (RRF), out of which member states are committed to utilise €648 billion in grants and loans. Around 42% of the RRF envelope has been earmarked for climate-related expenditure, while an additional 26% is related to the digital transition. However, additional financial resources from official and private sources may be necessary once RRF funds are terminated at end-2026.