



The EU Green Deal is a group of policies and initiatives that the EU jointly believes will produce the kinds of transformations in personal and corporate behaviour that will be required in a world facing such fast technological change and existential crises. It's a way to direct business investment into areas that are expected to help the transition to a low-carbon world. The investment amounts are large - €260 billion a year to fund decarbonisation across multiple industries - from energy transition to home insulation. And to raise that money and reach that outcome, the EU offers a huge raft of taxes and incentives.

We asked nearly 300 businesses in 13 European countries how they were preparing for the Green Deal given how it is likely to impact businesses' investments strategies and reporting². The short answer is that companies are running to catch up. This report details our findings. Key insights include:

60% unfamiliar with the

FU Green Deal

prepared for the EU Green Deal

already earmarked capital for sustainability

intend to shift their

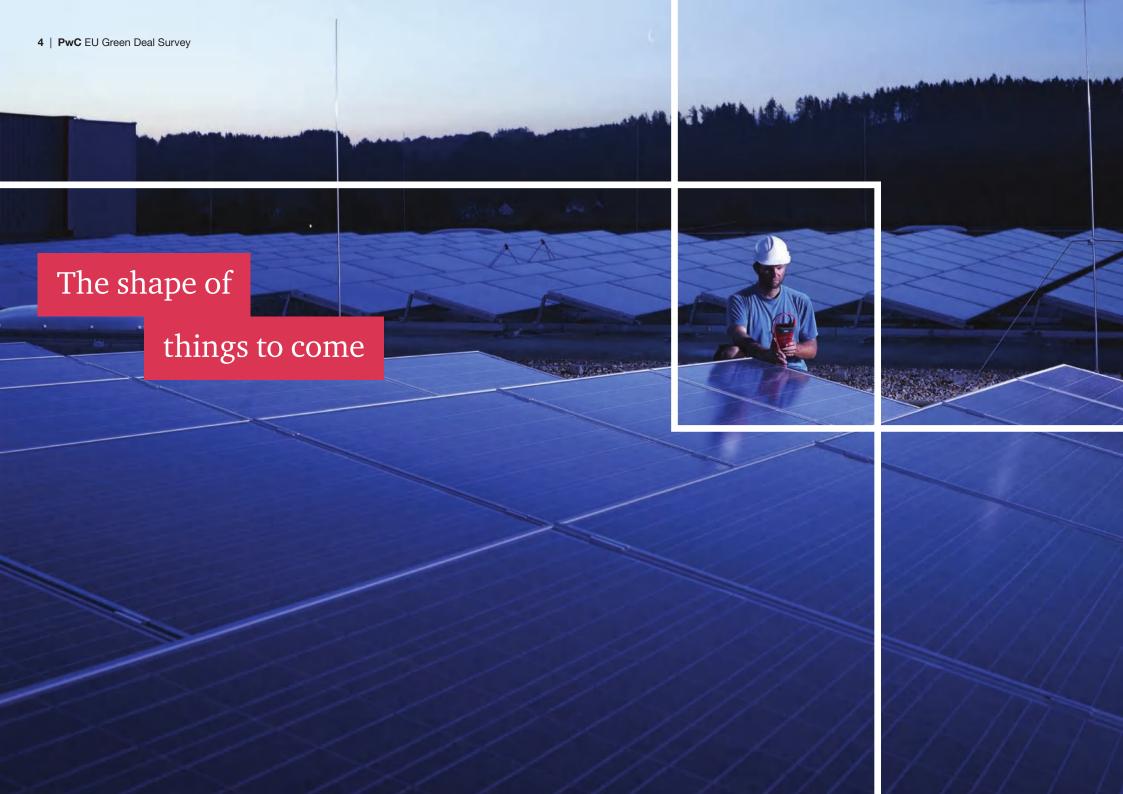
supply chain near term

- Fewer than half of organisations surveyed are familiar with the EU Green Deal.
- Fewer than half of organisations surveyed consider they are prepared for the EU Green Deal.
- Organisations want support to understand the implications of the Green Deal from a tax and operational perspective.
- The largest perceived challenges to implementing the EU Green Deal are a lack of awareness and a lack of organisational skills to maximise the benefits.
 - For example, one-third of respondents have made environmental improvements without investigating the availability of financial incentives.
- Responsibility for Green Deal-related issues is spread across organisations, with little coordination.
- Key areas of concern are transport, manufacturing and water consumption, with many companies having taken no action to convert to cleaner energy sources, reduce emissions or conserve water.

The EU Green Deal seeks to drive the fundamental business and value-chain transformation needed to address the climate emergency through its framework of regulation, incentives and levies. Our survey suggests that a majority of businesses lack a comprehensive strategy to respond to all the dimensions of the EU Green Deal.

Tax teams, in particular, are set to play an important role in maximising opportunities for transformation. It seems likely that tax departments will need to communicate with a wider range of stakeholders and will be more heavily involved in a range of ESG-related areas including impact assessment of environmental taxes, carbon footprint, reporting and tax transparency.

But the EU Green Deal is not just about taxes. It will affect procurement, supply-chain management, manufacturing, finance, ESG and human resources departments. These teams must work together to align their approach. To make the most of the incentives available for low-carbon transformation, and mitigate the impact of Green Deal levies, it is critical for companies to embrace a comprehensive, adaptive, long-term, transformational mind set.

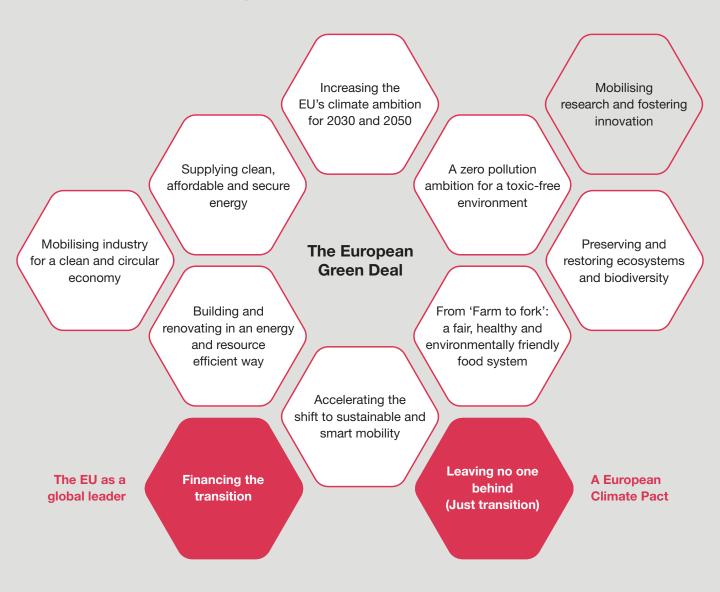


The EU has set itself the goal of becoming climate neutral by 2050. At stake is the biggest transformation of the economy and society since the dawn of the industrial era. Legislation is being adapted to make the green transition a reality. The EU has also adopted an interim goal of cutting greenhouse gas emissions by at least 55% by 2030, compared to a 1990 baseline. For this interim target, the EU has proposed a "Fit for 55" package that will include revisions and amendments to a number of **EU Directives (see appendix).**

The greening of the EU economy will bring about fundamental changes in the operating environment for business. The EU is expected to introduce more than 1,000 different levies to partially fund the €260-billion-a-year cost of the Green Deal3. These taxes and other revenueraising measures aim to promote investment in low-carbon technologies, big strides in energy efficiency and the shift to zero-emissions energy sources, reduced consumption of natural resources and better care of natural habitats.

Because of the sheer number of initiatives, companies in our survey expressed the need for support to understand the full impact of the Green Deal across their businesses and value chains. A majority of respondents to that survey indicated a lack of familiarity with the many components of the Green Deal. We summarise opposite those that are likely to have the greatest impact on business, from a cost, tax and operational perspective.

Transforming the EU's economy for a sustainable future





The biggest impact on businesses is expected to come from a proposed Carbon Border Adjustment Mechanism (CBAM). The CBAM will put a carbon price on selected imports to ensure that emissions reductions in Europe contribute to a global emissions decline.

The adjustment is designed to deter carbon leakage – shifting carbon-intensive production outside Europe – and aims to encourage industry beyond the EU to take steps in the same direction⁴. The CBAM will impose increased costs on companies that burn fossil fuels or import products with high carbon emissions, such as steel, chemicals, iron, cement and many manufactured goods. The European Commission plans to start implementing the CBAM in 2023. It will be fully effective in 2026. As it penalises carbon-intensive imports, it will influence supplychain choices. If import levies are set at a high level, it may encourage European businesses to source their inputs from within the EU area.



The EU has proposed numerous other levies in support of the Green Deal agenda. Regulations will be introduced to govern the sustainable use of land, water, plastics and the disposal of waste. Additionally, EU member states such as France, Germany and Poland are creating their own environmental taxation schemes in support of their climate obligations.

For example, an EU Directive banning single-use plastics took effect in July 2021⁵. The ban targets the 10 single-use plastic items most commonly found on European beaches. More plastic regulation is on its way to reduce the 29 million tonnes of plastic that are collected in the EU, Norway, UK and Switzerland every year⁶. The EU will charge member states a levy of €800/tonne of plastic waste. Governments have yet to decide how to pass this on to taxpayers, although Spain and Italy have already announced taxes on plastic use and Luxembourg and Poland are reviewing existing taxes on plastic.

29m

More plastic regulation is on its way to reduce the 29 million tonnes of plastic that are collected in the EU, Norway, UK and Switzerland every year



⁵ https://ec.europa.eu/environment/topics/plastics/single-use-plastics_en

⁶ https://plasticseurope.org/wp-content/uploads/2021/12/Plastics-the-Facts-2021-web-final.pdf



The European Commission proposes to revise the EU Emissions Trading System (ETS) in line with its more ambitious target of achieving net emissions reductions of at least 55% by 2030, compared to 1990 levels⁷.

Since its introduction in 2005, the EU ETS has cut emissions by more than 40% in the sectors covered by emissions trading. These include power and heat generation, energy-intensive industrial sectors and commercial aviation within Europe. The Commission now proposes to include road and maritime transport and buildings within the scope of the ETS and to subject all sectors to diminishing emissions permits.

Including road and maritime transport within the EU ETS will increase transport costs for business. This is expected to affect supply chains. Companies that do not take measures to shorten their supply chains will need to consider how to deal with the increased costs arising from increased carbon prices and the broadening of the ETS system. In our survey, just over half of respondents stated they intended to shift key locations in their supply chain – including sourcing, manufacturing or warehousing – mostly into the EU, or to different countries within the EU. Cost was cited as the main reason for changing locations.

40%

Since its introduction in 2005, the EU ETS has cut emissions by more than 40% in the sectors covered by emissions trading.





Intention to change the location of supply chain activities in the near future

% who intend to change location			Change of location			Still		
				Into the EU	Still within the EU	Out of the EU	outside of the EU	Don't know
Sourcing activities		20%		20%	31%	15%	2%	2%
Manufacturing activities		20%		36%	37%	20%	7%	0%
Warehousing activities		11%		38%	44%	18%	0%	0%

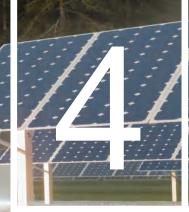
Source: PwC EU Green Deal Survey

Best practices

Case Study 1

A business operating data centres throughout Europe was looking for opportunities to reduce its local energy taxes, for example, by benefitting from local exemptions or lower tariffs. PwC surveyed 11 European countries to identify the energy-tax exemptions and other incentives available. In close co-operation with the business, PwC calculated the savings available, resulting in an optimal and compliant energy tax position.





Revision of the EU Energy

Taxation Directive

Energy taxation rules⁸ within the EU will also be revised to promote clean energy and discourage the use of fossil fuels, in line with the bloc's 2030 emissions targets. The key change will be a shift from taxation based on volume to taxation based on energy content and environmental performance.

Fuels that have the worst impact on the environment will be subject to the highest tax rates. Most significantly, fossil fuels for intra-EU air transport, maritime transport and fishing will lose their exemption from energy taxation. So, in addition to the expanded EU ETS, higher fuel taxes will increase transport costs for business. Some EU member countries, including Spain⁹, will ban the sale of gasoline and diesel vehicles altogether in the coming years.

In our survey, trucks were the most important mode of transport for at least 60% of respondents. This indicates an important vulnerability to higher fuel taxes. Only 28% of businesses said they were using clean fuel sources "at scale" for transport.

28%

of the survey respondents said they were using clean fuel sources "at scale" for transport.



⁸ https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_3662

⁹ La vanguardia (in Spanish)

Importance of the modes of transport for delivery						
% ranked top 2		Delivering raw materials	Delivering finished goods/ working processes to your primary warehousing facilities	Delivering finished products to customers or distribution		
Truck		61%	69%	70%		
Rail		34%	37%	34%		
Air	N	21%	18%	23%		
Water		34%	28%	25%		

Best practices

Case Study 2

A business in the food ingredient sector operates several production plants in the Netherlands. A tax audit uncovered several energy tax issues, mainly linked to the combined production of electricity and steam at its premises. PwC worked with the business to understand its energy tax position. This led to a review of all its production locations in the Netherlands to identify possible risks and an extensive, traffic-light style report for the tax department of the business to comply with their environmental tax obligations.



Source: PwC EU Green Deal Survey

The Green Deal will promote the development of electric charging infrastructure. In addition, the EU and its member states are making funds available for the greening of logistics. Companies should leverage these funding sources as they reassess their supply-chain operations.

The conversion to clean energy should also take into account the indirect costs related to alternative fuels. For example, it will take much longer to recharge electric and hydrogen-powered trucks and ships – with present battery technologies, about three hours to charge a truck and two days in port for a ship - than it does to refuel with existing fossil fuel sources. Companies need to consider the impact of longer refuelling times on inventory management and supply-chain organisation as they plan their transition to greener transport networks.



ESG reporting is on the rise and a growing number of companies voluntarily produce annual reports on their environmental impact, their work in the community and their governance structures. However, ESG reporting has not been standardised. This has given rise to the practice of greenwashing, while genuine efforts at ESG are undermined. A number of institutions are now working together to produce a single set of internationally accepted reporting standards for ESG.

Within this context, the IFRS Foundation has established the International Sustainability Standards Board (ISSB)¹⁰, with the intention of harmonising ESG reporting standards. The European Financial Reporting Advisory Group (EFRAG) and the IFRS Foundation should coordinate and work together as early as possible to agree on an international global baseline for sustainability reporting. Soon, the proposed EU Corporate Sustainability Reporting Directive¹¹ will extend the scope of non-financial reporting requirements to all large companies, whether they are listed or not, and without the previous 500-employee threshold. All listed companies in the EU, including SMEs, will be obliged to report their climate risks and impacts¹². The Directive must be transposed into national law before the end of 2022.

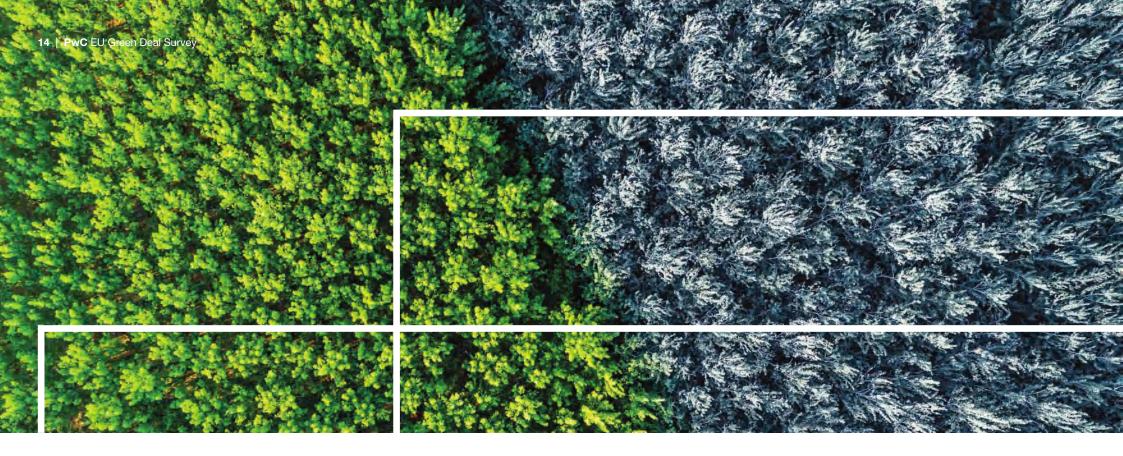
To avoid additional costs resulting from environmental taxes and meet their sustainability commitment, it will be necessary for companies to pivot from voluntary ESG initiatives to a systematic approach to ESG management. Companies will need to develop capabilities and processes to assess their ESG footprint across their supply and value chains and maximise the opportunities for green transformation.

¹⁰ https://www.ifrs.org/groups/international-sustainability-standards-board/

¹¹ https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/ corporate-sustainability-reporting en

¹² Large undertakings as defined by Directive 2013/34 of the EU shall be undertakings which on their balance sheet dates exceed at least two of the three following criteria: (a) balance sheet total: EUR 20 000 000; (b) extended number of employees during the financial year: 250.





Between July and October 2021, PwC asked nearly 300 businesses in 13 European countries how they were preparing for the Green Deal. The survey included companies in Norway, Switzerland and the UK, which are not in the EU but will be affected by the EU's new climate and environmental norms.

The respondents to our survey were primarily CFOs, CEOs, COOs and heads of tax at EU-based companies. PwC's survey questions were designed to assess the respondents' familiarity with and, preparedness for, each of the action items covered by the EU Green Deal.

The results indicate a lack of familiarity with the Green Deal and its constituent parts, and a lack of preparation and coordination within companies in response to the forthcoming changes. In particular, companies lack an overview of the full impact of Green Deal measures across their entire business value chain, making it difficult to plan for impacts that are either unknown or underestimated.

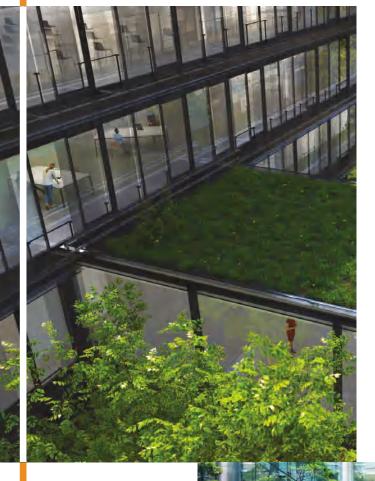
With respect to the incentives available for a green transition, it appears that most companies are addressing sustainability goals on an ad-hoc basis. A holistic strategy would allow businesses to take full advantage of all the incentives on offer, placing them in a more competitive position within the Green Deal landscape.

Not surprisingly, bigger companies with specialist tax and finance teams and well-resourced R&D and sustainability departments feel better informed and prepared for the coming challenges. However, even big companies say they are still in the early stages of understanding the Green Deal. All said they would welcome support to understand the tax and operational implications.

Key highlights from the survey results include:

- Fewer than half of organisations say they are prepared for the EU Green Deal
 - Key areas of concern to companies are transport, manufacturing and water consumption. Many companies stated that they have not yet taken action to adopt renewable energy, reduce emissions or conserve water.





- The largest perceived challenge to companies is to embed all the EU Green Deal dimensions into the entire organisation and processes to quantify the costs of Green Deal levies, the potential benefit from available incentives and maximise the opportunities arising from the transition to more sustainable economies.
 - While companies are taking concrete steps to address certain Green Deal priorities, they do not necessarily identify the incentives available to finance, at least partially, the transition. For example, onethird of respondents stated that they have made environmental improvements without investigating the availability of financial incentives.
 - Organisations want support to understand what the EU Green Deal means for them, and advice on investments, financing options. As a matter of fact, most companies have only one individual responsible for environmental taxes.
- Two-thirds of the companies surveyed have already earmarked capital to invest in becoming more sustainable over the next three to five years.
 - However, sustainability initiatives are being undertaken on an ad-hoc basis, rather than as part of an integrated plan. Priorities include consuming more clean energy (78% of companies), reducing energy consumption (60%), reducing waste and plastic use (59%) and cutting carbon emissions (59%).



Priorities guided by environmental tax impacts

Clean energy

78%

Reduce energy consumption

60%

Reduce waste

59%

Reduce carbon emissions

59%

Recycling/re-use

49%

Reduce water consumption

45%

Clean water

43%

No priorities

2%

Source: PwC EU Green Deal Survey

- For the companies in our survey, manufacturing (44%), distribution (27%) and procurement (18%) generate the highest emissions and are therefore the focus of the biggest sustainability efforts. We asked businesses what sustainability improvements they were making to buildings, equipment and manufacturing processes.
 - Some 70% of companies undertaking environmental improvements have tapped incentives, grants and tax credits to do so.
 - Initiatives range from climate-proofing buildings to reducing energy and water consumption, eliminating waste or disposing of it more sustainably and increasing the digitalisation of manufacturing processes. Many businesses also stated that they are making improvements to manufacturing processes to reduce energy consumption.
 - 70% of respondents said they were using clean energy "at scale" to power operations. In addition, almost 50% of respondents said they were actively working to reduce their carbon footprint and onethird said they were compensating for their carbon emissions with sustainability initiatives.
 - Clean energy is being used to heat and cool offices (47%) and power production facilities (44%).
 - Only 28% of respondents reported using clean fuels in their transport operations.
 - Water consumption is a major focus of sustainability efforts. Nearly two-thirds of respondents say they are seeking to use less water in manufacturing processes or in products themselves.

Environmental improvements to manufacturing equipment/machinery

Energy consumption improvement		61%	
Water consumption improvements		46%	Of those who have made improvements - whether preferential financing used for improvements
Physical waste improvements	⑩	38%	31% from grants 26% from tax credits 30% not from preferential financing
Carbon and similar emissions improvements	@	34%	

14% Have not undertaken improvements to make production processes more sustainable 9% Don't know

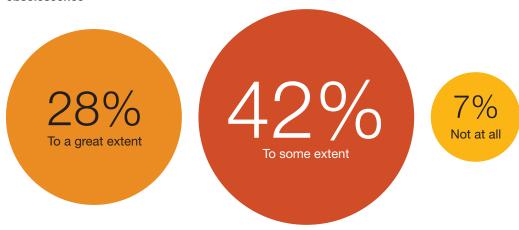
Source: PwC EU Green Deal Survey

Larger organisations, and those that have taken other actions related to their organisation's environmental performance, are more likely to have made improvements to their manufacturing equipment/practices



- The vast majority of these respondents stated that they intended to shift such functions into, or within, the EU.
- Cost, rather than sustainability concerns, is for now cited as the main driver of relocation decisions.
- A transition to the circular economy is another priority of the Green Deal and our research shows that businesses are taking steps to reduce the generation of waste and emissions, as well as to promote longer life cycles and the reuse of products.
 - Seven out of ten organisations are investigating ways to refurbish or repurpose products to extend their usable life.
 - Businesses are monitoring inventory more closely to limit the disposal, destruction or scrapping of unsold goods. Donating and recycling unsold products is now becoming more attractive than throwing them away.
 - Nearly half of respondents indicated they were making efforts to reduce the amount of hazardous waste generated by their production processes and to increase the amount of waste being recycled.

Proportion refurbishing or repurposing products with a finite lifetime or expected obsolescence



70%

of organisations have investigated ways to refurbish or repurpose products with a finite lifetime or expected obsolescence.

These organisations are significantly more likely to be those who are familiar with and/or prepared for the implementation of the EU Green Deal

Source: PwC EU Green Deal Survey

We do not have products with a finite lifetime or expected obsolescence: 11%

Don't know: 11%



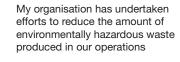


50%

Half of respondents indicated they were making efforts to reduce the amount of hazardous waste generated by their production processes and to increase the amount of waste being recycled.

% that have undertaken efforts to identify articles to be registered with the EU Substance of Concern database (SCIP) % that have undertaken efforts to identify articles to be registered % of products subject to SCIP reporting with EU SCIP database Yes - and we have also identified 30% individuals responsible for SCIP reporting NET: Yes Yes - but we have not identified 45% 15% individuals responsible for SCIP 35% reporting 20% No 36% Don't know 28% Source: PwC EU Green Deal Survey ■ Less than 25% ■ 25% to 49% ■ 50% to 74% ■ 75% or more ■ Don't know

Efforts to reduce the amount of hazardous waste produced and/or increase the amount of waste that is recycled



My organisation is actively working to increase the amount of waste that is ultimately recycled

My organisation is actively working to decrease the amount of non-recyclable packaging used throughout its supply chain

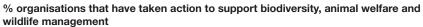
My organisation is actively working to decrease/eliminate noise and light pollution

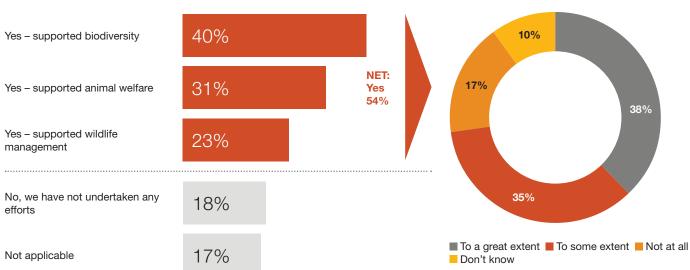


Agree 48% -

■ Don't know ■ 1. Strongly disagree ■ 2 ■ 3 ■ 4 ■ 5 ■ 6 ■ 7 ■ 8 ■ 9 ■ 10. Strongly agree







Source: PwC EU Green Deal Survey

- % researched availability of incentives/credits related to biodiversity/wildlife conservation
- it will also impact businesses that are active in the provision of services.

 Half of the companies in our survey actively support biodiversity, animal welfare or wildlife management and 40% have researched the availability of incentives and credits for biodiversity and wildlife conservation. These initiatives reforestation, for example are generally attractive even to companies that are not engaged in land- and sea-related activities as they contribute to their ESG efforts and brand positioning.

 Fewer than one-quarter of agri-business companies in our survey said they had reduced their use of chemical positions for the provided services are genetically.
 - Fewer than one-quarter of agri-business companies in our survey said they had reduced their use of chemical pesticides, fertilisers or genetically modified crops. The survey detected a strong interest among respondents to learn more about incentives and credits for sustainable agriculture and food production.

• The impact of the Green Deal is not limited to

Its scope also covers agriculture, farming, mining,

forestry and other land- and sea-related activities but

companies engaged in manufacturing.

 Among companies that are incorporating organic farming methods and/or reducing the use of antibiotics, at least half said they had researched the availability of incentives and credits.

The need for fundamental transformation

Despite all of these efforts, our survey establishes that many companies have yet to embark on the fundamental business and value-chain transformation that will be required to thrive within the Green Deal framework.

A coherent strategy to reshape supply chains and access funding will require co-operation between all business functions and departments, as well as close collaboration and transparency between companies, suppliers and distributors.

In particular, the heads of procurement, finance, tax, manufacturing, ESG, HR and other departments must work together to reshape their supply chains, minimise the impact of carbon taxes and other levies, and access funding opportunities.

Our survey indicates that companies need support to build capacity, and expertise to understand all the implications of the Green Deal.

In particular, companies need to pay attention to how the role of the tax function will change with the Green Deal, given that more than 1,000 new or modified levies are in the works. In the very near future, it is likely to expand to include assessing the impact of environmental taxes, the company's carbon footprint, ESG reporting and tax transparency. And yet our survey indicated that most companies have only one individual responsible for environmental taxes. In future, dealing with the tax implications of the Green Deal will require a crossfunctional team working in close collaboration with other departments. As many Green Deal and "Fit for 55" changes are starting to take effect, companies need to plan for this transformation now.

With the Green Deal, tax will no longer be a cost centre or support function, but an integral part of the business organisation and an important value driver. Tax is likely to become a key indicator of businesses' contribution to society, supporting the reputation of successful companies.

How can PwC help?

PwC is already assisting companies with the transformation that will be necessary to thrive in the Green Deal environment, including the identification of EU and member state funding opportunities.

Transformation begins by understanding the impact of various levies on the bottom line. From a baseline of their cost base at present, companies need to assess how their costs will rise as the CBAM, expanded EU ETS, amended Energy Tax Directive and other green levies kick in. Once the increased costs are quantified, companies can decide how to respond.

Companies bidding on multi-year contracts must take particular care to incorporate these additional costs. If they cannot increase prices, they will need to implement cost reductions elsewhere to maintain profit margins.

Our survey also indicates that companies are only beginning to map their supply chains from the point of view of carbon footprints, resource management and the additional levies on carbon-emitting transport, and that significantly more work is needed in this area.

Lastly, companies must consider capital investment outlays holistically, to take full advantage of the funding opportunities under EU and member state resources.

All this amounts to a blueprint for green transformation. PwC can help with this, including: informing clients of Green Deal levies, the financial modelling of impacts, value-chain transformation, tax transparency, reporting and assisting with scouting for EU and member state funding opportunities, as well as with the necessary applications to access such funds.

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The EU Green Deal

In addition to climate neutrality, the Green Deal is focused on the following eight action items:

- Strengthening biodiversity, restoring degraded ecosystems and sustainable forest management
- Fostering a sustainable, affordable and nutritious food system
- Implementing circularity and environmental protection in industry
- Transition to clean, affordable energy
- Development of a chemicals strategy that protects humans and the environment
- Transition to sustainable mobility
- Intensive renovation efforts in the housing and building spheres
- Ensuring a just and fair transition to the sustainable future

Fit for 55

The "Fit for 55" package will revise existing EU Directives and propose new ones with the aim of meeting the EU's plan to reduce greenhouse gas emissions by 55% by 2030, compared to 1990 levels. It has two parts.

Part One, published in July 2021, contains revisions to the:

- EU Emissions Trading System (EU ETS)
- Regulation on Land Use, Land-Use Change and Forestry (LULUCF)
- Effort Sharing Regulation (ESR)
- Energy Taxation Directive
- Alternative Fuels Infrastructure Directive (AFID)

Part One also contains amendments to the:

- Renewable Energy Directive (RED)
- Energy Efficiency Directive (EED)
- Regulation setting CO2 emissions standards for cars and vans

Additionally, Part One contains the following new legislative proposals:

- New EU Forest strategy
- A Carbon Border Adjustment Mechanism (CBAM)
- A Climate Action Social Facility
- ReFuelEU Aviation
- FuelEU Maritime

Part Two, released in December 2021, covers:

- Revision of the Energy Performance of Buildings Directive (EPBD)
- Recommendations to address the social and labour aspects of the climate transition
- Reduction of gas usage

For more information on the EU Green Deal, please visit the PwC knowledge hub at https://www.pwc.com/gr/en/advisory/risk-assurance/sustainability-climate-change/eugreen-deal.html



www.pwc.com/eu-green-deal-survey