An Roinn Caiteachais
Phoiblí agus Athchóirithe
Department of Public
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Budget 2023

The Use of Carbon Tax Funds 2023

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As per Sections 27, 28 & 29 of the Finance Act 2020[1], the carbon tax will increase by €7.50 a tonne. The increase on transport fuels is effective from October 12th 2022, while the increase on home heating fuels will not take place until 1st May 2023, after the winter heating season.

As per the commitment in the Programme for Government, all of the revenue that will be raised by this increase in carbon tax, estimated at €9.5bn over 2021 – 2030, will be used to:

- Ensure that the increases in the carbon tax are progressive by spending €3 billion on targeted social welfare and other initiatives to prevent fuel poverty and ensure a just transition;
- Provide €5 billion to part fund a socially progressive national retrofitting programme;
- Allocate €1.5bn of additional funding to encourage and incentivise farmers to farm in a greener and more sustainable way.

This note details the allocation of carbon tax funds in line with the Programme for Government commitments and outlines the programme areas that will receive additional funding.

Rising Energy Costs

Large increases in energy prices, driven by the war in Ukraine, are having a significant impact on households in Ireland. Research by the Economic and Social Research Institute (ESRI) suggests that by one measurement[2], energy poverty in Ireland has increased from 13% in 2015/2016 to 29% in mid-2022.

Energy poverty occurs at the intersection of a household's income, the energy performance of their home, and the cost of energy. While significant progress has been made to alleviate energy poverty in Ireland by boosting social transfers and through energy efficiency schemes, the sudden rise in energy costs is leading to an increase in energy poverty rates that needs to be addressed.

However, research by the ESRI has found that cutting indirect taxes (such as the carbon tax) on energy is not effective at tackling energy poverty. While energy prices would be lower, about half of the aggregate gains from such tax cuts would go to the highest-income 40% of households compared to less than a third of gains to the lowest-income 40%.

Instead, targeted payments to households most affected by rising energy prices result in gains that are larger in both cash terms and as percentage of income. Consistently, internal Government analysis using the SWITCH model has found that the increases in the carbon tax have been progressive as a result of the increased social protection payments funded by the carbon tax.

This remains true for the carbon tax increase in Budget 2023. In fact, the analysis conducted in support of Budget 2023 has found that households in the bottom five income deciles are better off as a result of the increased spending on social protection made possible by the increases to the

[1] http://www.irishstatutebook.ie/eli/2020/act/26/enacted/en/html
[2] Defined as households that spend more than a tenth of their net income on energy (including electricity but excluding motor fuel

carbon tax. So, **the lowest income half of all households in Ireland are net beneficiaries from this increase in the carbon tax.**

However, the specific compensatory measures funded by the carbon are just a part of the Government's response to the current energy crisis. The Cost of Living package agreed as part of Budget 2023 will provide direct energy supports worth nearly €1,000 over 12 months to every domestic household in the country. The direct energy supports that every household will receive include:

1) **Energy credits worth an additional €600**: €600 in additional energy credits will be paid over winter 22/23. This is in addition to the €200 credit already paid in April/May 2022. These credits will be reflected directly on consumer electricity bills.

2) **A PSO rebate worth €89**: The CRU has confirmed that the Public Service Obligation for 22/23 will be negative. Every domestic household will receive this €89 as a credit on their electricity bills. Compared to last year, this represents an annual saving of €140.76.

3) **Lower VAT on energy bills worth €64**: The 9% VAT rate on energy bills has been extended to February 2023. This represents a gain worth approximately €64 for the average household over the period October 22 – February 23[3].

Cumulatively these supports are worth €753 per household or €953 when the value of the previous credit is considered. The energy credits and PSO rebate are fixed amounts that every household will receive - €689. The value of the lower VAT rate varies based on energy consumption but will be worth €64 to the typical household over October to February.

A low income household that is in receipt of just the fuel allowance, will, when combined with the measures above and the previous energy credit, receive direct State support of €2,492 over 22/23. If we assume that the household will use exactly the same amount of energy as 21/22, **the State will be covering an estimated 62% of that households total energy needs over 22/23.**

In addition, the Department of the Environment, Climate and Communications (DECC) is developing a new Action Plan to Combat Energy Poverty. The forthcoming Action Plan will set out the range of measures to protect households that will be implemented ahead of the coming winter, as well as key longer-term measures to ensure that those least able to afford increased energy costs are supported and protected. This action plan is a priority and will be published shortly after Budget 2023.

In the longer term, the Government recognises the need to diversify our energy supply and end our reliance on fossil fuels. As such, the Government has in recent months committed to a number of new ambitious targets to increase Ireland's renewable energy capacity. These include an off-shore wind target of 7 GW, a solar energy target of 5.5 GW and incentivising the use of up to 5.7 TWh of anaerobic digestion, all by 2030.

[3] Based on a typical household energy bill of €4k per annum, minus the €800 energy credits which are inclusive of VAT and assuming energy bills over five months that are 50.5% of total annual consumption.

Available Funds

The Programme for Government commits to additional spending of €9.5bn using the revenues raised by the planned increases in the carbon tax over the period 2021 – 2030. In 2023, additional spending of **€211m** will be funded by the carbon tax. This will bring total carbon tax financed expenditure to **€623m** in 2023. This is comprised of the €90m in revenue made available in 2020, €148m in 2021, €174m in 2022 and €211m 2023.

As per the Programme for Government, €5bn of the expected €9.5bn in additional carbon tax receipts will be invested in energy efficiency initiatives in the residential and community sectors. This capital funding has been incorporated into the total capital made available to 2030 for the Department of Environment, Climate and Communications in the National Development Plan (NDP). The indicative total capital allocation made available to the Department of the Environment, Climate and Communications in the NDP is €12.9bn.

This level of funding would not have been available without the additional revenues raised from the planned increases in the carbon tax. The even annual allocation of carbon tax funds results in an additional allocation of **€89m** to the Department of Environment, Climate and Communications in 2022 for investment in energy efficiency, as per the National Development Plan commitment. This brings total carbon tax funding for energy efficiency to **€291m** in 2023.

The remaining €4.5bn in additional carbon tax receipts will be used to boost the Government's current expenditure levels. Again, as per the Programme for Government, €1.5 billion of additional current funding will be made available over 2021 – 2030 for new schemes that will assist farmers to address the climate and environmental challenges in the agricultural sector.

An even allocation of the €1.5bn for the Department of Agriculture, Food and the Marine (DAFM) should result in an additional allocation of €29m in 2023. However, the Department of Agriculture, Food and the Marine deferred their carbon tax allocation in 2022, save the continuation of the 2020 funding of €3m for green agricultural pilots. This funding was deferred on the basis that it would form part of the suite of programmes under the new Common Agricultural Policy, commencing in 2023. Therefore **€81m** Carbon tax funding has been allocated for the Department of Agriculture, Food and the Marine in 2023, including an additional **€78m** compared to 2022. This figure represents the €49m that was forgone in 2022, plus the addition of the annual €29m increase in funding.

This additional €78m will fund the new Agri-Climate Rural Environment Scheme (ACRES) which will support farmers who undertake actions which are beneficial for the environment. This will includes measures that support mitigating carbon emissions, protecting water quality, improving soil fertility, protecting biodiversity, adapting to climate change, and reducing chemical fertiliser usage. Beyond ACRES, the remaining €3m of the 2023 Carbon Tax funds will support other initiatives, including a demonstration anaerobic digestion project.

The remaining €3bn in funding will be explicitly used to ensure that increases in the carbon tax are progressive by tackling fuel poverty and providing for a Just Transition. Evidence provided by the ESRI has formed the basis of the measures used to protect the vulnerable from the impacts of the

rising carbon tax. To keep abreast of research, decisions on specific compensatory measures on social protection are made as part of the annual budgetary cycle.

The ESRI's research[4] demonstrates that recycling one third of the revenue raised from the carbon tax increases ensures the lowest income fifth of households are better off, on average, and reduces poverty. An even annual allocation of the remaining €3bn for the Department of Social Protection results in an additional allocation of **€44m** in 2023.

The Department of Social Protection received €49m in excess of their scheduled allocation in 2022 (resulting in an additional allocation of €105m)[5]. This additional funding will be allocated again in 2023, resulting in a sizeable €218m total allocation in 2023. This means **35% of the total hypothecated carbon tax revenues will be spent on social protection measures in 2023**, ensuring that increases in the carbon tax are progressive. This revenue will also support an overall welfare package of over €1bn.

The table below details the allocation of the increased carbon tax revenues in 2023:

Table 1: Allocation of Carbon Tax Funds in 2023

	€ m 2023	**Department**	**€ m 2022**
1. Total Investment in Residential & Community Energy Efficiency	291	DECC	202
2. Total Targeted Social Protection Interventions	218	DSP	174
3. Incentivising farming in a greener and more sustainable way	81	DAFM	3
4. Continuation of 2020 Carbon Tax Investment Programmes in Other Departments	33	Various	33
Total Expenditure	**623**		**412**

[4] https://www.esri.ie/system/files/publications/SUSTAT98_0.pdf

[5] The €20m that would have been available for the continuation of 2021 agricultural pilot schemes in 2022 and the additional allocation of €29m from the Budget 2022 increase in the carbon tax were allocated to additional measures to address energy poverty in the Department of Social Protection.

1. Investment in Residential & Community Energy Efficiency

The residential sector accounts for a quarter of Ireland's total energy usage and approximately 10% of greenhouse gas emissions. Irish homes use 7% more energy than the EU average and emit 60% more CO_2. For these reasons, improving the energy performance of the housing stock is a core commitment in the Climate Action Plan and the Programme for Government.

Improving the energy efficiency of a home also permanently decreases the amount of energy that is required to heat that home to an adequate degree. This reduces greenhouse gas emissions but it also protects households from the impact of rising energy prices.

The National Development Plan commits to investment of at least €8bn in residential retrofit to 2030. The majority of funding for this programme, €5bn, will be financed by carbon tax receipts. This funding is expected to support the retrofit of 500,000 homes to a Building Energy Rating of B2 or equivalent and to install 400,000 heat pumps in existing homes by 2030.

These targets will be achieved through the National Retrofit Plan, implemented by the Sustainable Energy Authority of Ireland. Budget 2023 commits over €337m in funding for these schemes in 2023, of which, **€291m will be funded through increases in the carbon tax**. €133m of this allocation will be used to provide free energy efficiency upgrades to households in, or at risk of, energy poverty through the Warmer Homes Scheme.

The remainder will fund SEAI grant schemes and initiatives including:

- A continuation of the 80% special enhanced grant rate for attic and cavity wall insulation introduced for all households as part of the Government's response to the Ukraine war;
- The National Home Retrofit Scheme supporting homeowners to achieve deeper (B2) retrofits with heat pumps;
- The Better Energy Homes Scheme for homeowners wishing to take a step-by-step approach to upgrading their homes; &
- The Community Energy Grant scheme which supports cross-sectoral and community-oriented partnership approaches that deliver energy savings.

This investment will support over 37,000 home energy upgrades (including solar PV), including over 13,800 homes to a Building Energy Rating (BER) of B2 and 6,000 free upgrades to the homes of those in, or at risk of, energy poverty. **These are the highest ever annual targets for home energy upgrades** and reflect the priority with which Government regards efficiency as a contributor to reduced energy poverty.

The carbon tax investment will be complemented by significant additional Exchequer funds which will provide for increased staffing levels in both the Department of the Environment, Climate and Communications and the SEAI.

Funding will also be provided to support the introduction of a new low-cost loan scheme for residential retrofit. This will enable the credit institutions to offer loans with reduced interest rates to make comprehensive home energy efficiency upgrades more affordable to consumers. The scheme will also signal to the banking sector new viable business opportunities associated with the transition to a low carbon economy.

This investment in residential retrofit will result in a range of benefits including:

- Lower energy bills and help to address energy poverty;
- Improved comfort, health and wellbeing, particularly for younger and older people, through improved internal dwelling temperatures and air quality;
- Reduced greenhouse gas emissions;
- Improved asset values; and
- Increased economic activity and high quality jobs created throughout the country.

2. Targeted Social Protection Interventions

The Programme for Government commits to ensuring that increases in the carbon tax will be progressive. This means protecting the most vulnerable in society from the impacts of the tax and indeed, where possible, ensuring they are better off than before. In 2020, the ESRI examined the options available to offset the impacts of a carbon tax increase on low income households.

The resulting ESRI research paper, "Carbon Taxes, Poverty and Compensation Options" found that a €7.50 increase in the carbon tax has no impact on the population level risk-of-poverty rate. However, the impact of a carbon tax increase is not distributed across households evenly. Lower income households spend a higher proportion of their income on energy costs, and in particular, on heating their homes. This is exacerbated by the fact that lower income households typically live in less energy efficient homes. As a result, increases in the carbon tax rate can be regressive in the absence of measures to compensate these households.

The ESRI however concluded that recycling just one third of the revenue raised from a €7.50 increase in the carbon tax would result in a reduction in the poverty rate and could leave the lowest two income deciles better off than before the increase.

In light of the ESRI research and the commitment to ensure that the carbon tax is progressive, the Government has committed to increases in a targeted package of social protection supports in Budget 2023. These supports were selected to counteract the impact of the increased carbon tax on low income households. The specific measures are:

- **An increase to the a Qualified Child Payment of €2 per week for children under 12 and €2 per week for children over 12** - This protects low income families and will reduce child poverty;
- **An increase to the means limit applied to eligibility for Fuel Allowance from €120 to €200 above the relevant rate of SPC** - This increase in the income allowed for the means test that is applied to applicants allows more households to benefit from the fuel allowance;
- **An increase to the threshold for eligibility for the Working Family Payment of €40 per week** – Research has found that children in energy poverty have a greater likelihood of respiratory illness. Using carbon tax funds to compensate low paid employees with children will lead to improved health outcomes, particularly when combined with the qualifying child payment.

The total cost of these interventions is projected at €57m in 2023. This will be part-funded by the additional carbon tax funds of **€44m** that have been allocated to the Department of Social Protection, with the remaining €13m cost met by the Exchequer.

Analysis undertaken using SWITCH, the ESRI tax and benefit model, to simulate the impact of the carbon tax increase and the compensatory welfare package estimates that the net impact of the combined measures is progressive. Specifically, the analysis funds that households in the bottom five income deciles are better off as a result of the social protection measures funded by the increased carbon tax.

These changes will be accompanied by a further reform that will expand eligibility for the fuel allowance. The allowable income for the fuel allowance means test for the over 70s will be increased by €500 for a single person and €1,000 for a couple. This carries an estimated annual cost of c. €53.5m.

This reform seeks to ensure that older people not currently in receipt of fuel allowance but who are marginally outside the thresholds will now be covered by the scheme. This reform is being made because older people can often be more vulnerable to the effects of energy poverty. Colder indoor temperatures place thermal stress on the body, affecting the immune system and the blood and cardiovascular system. This can lead to more serious medical conditions and place stress on the health system, particularly over winter months.

3. Incentivising farming in a greener and more sustainable way

In 2023, **€81m** in carbon tax funding will be provided to the Department of Agriculture, Food and the Marine. This is a **€78m increase in funding year on year**. This increased funding will be used to fund the new Agri-Climate Rural Environment Scheme (ACRES) detailed in Ireland's Common Agricultural Policy (CAP) Strategic Plan 2023.

The purpose of this scheme is to support up to 50,000 farmers when fully operational who undertake actions that will be beneficial for the environment. This will support improved outcomes on biodiversity, climate, air and water quality.

The scheme will have two approaches:

1. An Agri-Climate Rural Environment Scheme (ACRES) general approach open to all farmers for targeted and general actions; and
2. A Co-operation Project approach, focused in defined high priority geographical areas, for general actions, as well as bespoke farm, landscape and river catchment actions.

Participating farmers will be required to address priority assets (e.g. critical source areas for water, priority habitats) on their farms, similar to previous agri-environment and climate measures. These actions will be a combination of prescription-based measures (at a fixed rate of payment) and results-based measures (where the level of payment is based on the results achieved).

Farmers in areas with higher environmental priorities will be able to participate in specific co-operation actions which may attract higher payments. Any additional bespoke farm/landscape measures required will be implemented with the assistance of the Cooperation Project Team at local level.

This co-operation element will support a landscape approach in these areas for the management and restoration of priority habitat/species. It will also aid carbon storage, water quality, and biodiversity through improved land management and resilience. This is also expected to have a positive impact on other problems facing these landscapes, such as, landslides, flooding, mountain fires, management of commonages, invasive species and predator control.

There will also be dedicated actions on improved water table management. Similarly, significant tree-planting measures will be included, including agro-forestry and riparian planting. These elements will help deliver co-benefits on water quality and biodiversity.

Use of Capital Carbon Tax and Anaerobic Digestion

The European Commission, earlier this year, through its REPowerEU communication, highlighted the important role of biomethane as part of the decoupling from Russian natural gas supplies. Hence, the Government Decision on Sectoral Emissions Ceilings (SEC) also included an increase in ambition for domestic biomethane production of up to 5.7 TWh (ca. 10% of gas supply).

Achieving 5.7 TWh of indigenously produced biomethane will require a significant and rapid scale-up for an Anaerobic Digestion industry in Ireland. Elements of the carbon tax funds allocated to DAFM will support this scaling up.

In particular, €2m will be provided to support a Grass Bio refinery project. This will support a biomethane demonstration and test bed facility with bio refinery capabilities. The outputs from this project will enhance the knowledge and skills base around the complimentary of biomethane production and bio refinery activities.

DAFM have, in collaboration with DECC, developed a business case for a Biomethane Acceleration Programme (BMAP). DAFM also intends to allocate €150k of carbon tax funding to the RePeat project with any additional funds to the GreenFeeds programme and/or the soil monitoring program for additional soil testing for soil carbon.

4. Continuation of 2020, 2021 & 2022 Carbon Tax Investment Programme

As noted, additional spending of €211m will take place in 2023. However, total carbon tax spending in 2023 will be **€623m**. €412m will continue to be spent on measures announced in Budgets 2020, 2021 and 2022.

Budget 2021 and 2022

Budget 2021 saw a €7.50 increase in the carbon tax. The resulting revenues were estimated at €148m. In addition, €20m from the revenues generated in 2020 was available for allocation[6]. This meant that €168m was available for new carbon tax spending measures in 2021. €148m of funding was allocated to investment in residential & community energy efficiency and targeting social protection interventions. The additional €20m of funding was made available for pilot environmental programmes in the agriculture sector in 2021. Following the conclusion of this measure the funding was re-profiled to support additional investment in social protection measures in 2022. In addition, the €148m was allocated to continue the 2021 investment programme.

Budget 2022 also saw a €7.50 increase in the carbon tax. An even allocation of the carbon tax revenue over the course of the decade meant that €174m was available in 2022. This funding will be continued in 2023.

For 2022, the Department of Agriculture, Food and Marine deferred €49m of their carbon tax allocation as these schemes will form part of the suite of programmes under the new Common Agricultural Policy commencing in 2023. This meant that the Department of Social Protection received an increased allocation for 2022. The Department of Social Protection allocation of €105m from 2022 will continue in 2023.

The table below illustrates the continued allocation of carbon tax funds to the individual programmes:

Table 2: Continuation of 2021 and 2022 spending in 2023

	€ m - 2021	€m – 2022	€m - Total 2021 and 2022 spending in 2023
1. Investment in Residential & Community Energy Efficiency	100	89	189
2. Targeted Social Protection Interventions	48	105	153
Total Expenditure	**148**	**194**	**342**

[6] This reallocation arose as the Local Authority housing upgrade scheme in the Midlands was a once-off pilot scheme to determine the savings that might be obtained through the aggregation of energy efficiency upgrades to larger batches of public sector housing. On its conclusion, the funding provided for the scheme was re-prioritised.

Budget 2020

In Budget 2020, the Minister for Finance announced that the projected revenue raised by a €6 increase of the carbon tax in 2020 (€90m) would be ring-fenced to protect those most exposed to higher fuel and energy costs, to support a just transition for displaced workers and to invest in new climate action.

Specifically, ten programmes benefitted in 2020 from the increased funding provided by the carbon tax. These programmes ranged from increases to the fuel allowance and energy efficiency schemes targeted at energy poverty, to the creation of a Just Transition Fund and increases in the allocations to greenways and urban cycling programmes. The Government continued to fund these programmes (with one exception) in 2021 and 2022, and will continue to fund these programmes in 2023.

The table below illustrates the continued allocation of carbon tax funds to individual programmes:

Table 3: Allocation of Continued Carbon Tax Investment Programme from 2020

	€ m - 2023	Department
Protecting the Vulnerable		
1. Fuel Allowance	21	DSP
2. Energy Poverty Efficiency Upgrades	13	DECC
A Just Transition		
3. Aggregated Housing Upgrade Scheme[7]	0	DHLGH
4. Peatlands Rehabilitation	5	DHLGH
5. Just Transition Fund	6	DECC
Investing in the Low Carbon Transition		
6. Greenways/Urban Cycling	9	DoT
7. Continuation of Electric Vehicle Grants	8	DoT
8. Further Investment in EV Charging Infrastructure	3	DoT
9. ODA - Green Climate Fund	2	DECC
10. Green Agricultural Pilots	3	DAFM
Total Expenditure	**70**	

[7] This was a once-off pilot scheme. On its conclusion, the funding provided for the scheme was re-prioritised

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