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A levy on fossil fuel-linked business ownership held by high-wealth individuals

CE Delft

Content

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This publication was written by:
Sjoerd Boerdijk, Balder Stalmeier, Richard Kooloos and Martijn Blom

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More information about the study can be obtained from the project leader Sjoerd Boerdijk (CE Delft)

Content

Summary

Background and objectives

Existing climate policies such as carbon pricing and emissions trading systems increase the costs of emitting greenhouse gases and aim to encourage a shift towards cleaner energy sources. Despite this, investments in businesses that rely on fossil fuels often remain profitable. The long-lived nature of fossil fuel investments risks 'carbon lock-in', effectively exhausting the (remaining) carbon budget and undermining global decarbonisation efforts. Their continued profitability suggests that fossil fuel-related investments are insufficiently discouraged by existing policy instruments.

Against this background, Oxfam is exploring carbon-differentiated forms of taxation that link tax burdens more directly to investments associated with fossil fuels. This study examines design options and potential effects of a Carbon Capital Levy: a levy that applies to high-wealth individuals with investments in businesses engaged in fossil fuel-related activities.

Design of a Carbon Capital Levy

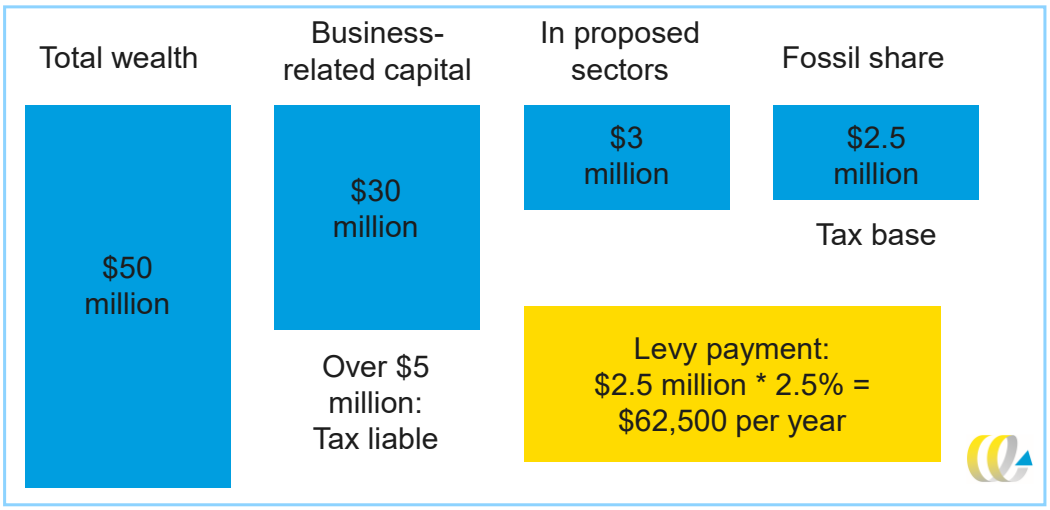
- **The levy applies to business capital owned by high-wealth individuals**. This includes private business ownership, publicly listed business ownership, and other types of business capital such as investment portfolios, investment funds, hedge funds and Exchange Traded Funds (ETFs). Other types of wealth such as real estate, bank deposits and luxury assets are excluded from the tax base.
- **The levy only applies to high-wealth individuals.** For the main analysis, we use a threshold of US$5 million in business capital. This means that for more than 99.9% of the world population, this levy does not apply. Other thresholds we have considered are US$10 million, $50 million and $100 million.
- **The levy applies to business capital that enables the use of fossil fuels.** Business-related capital that is unrelated to the use of fossil fuels, is excluded from the levy. In this way, investment returns on fossil fuel-related capital are reduced, encouraging investors to shift capital towards businesses that help phasing out fossil fuels. The levy also incentivises firms to reduce their dependency on fossil fuels.

- **The levy applies to six sectors that cover roughly 77% of worldwide CO_2 emissions.** The levy applies to electricity generation, oil and gas, construction, automotive, aviation and shipping. Worldwide, these sectors account for roughly 13% of total business capital.
- **We propose a levy rate of 2.5% per year.** This is applied to the value of fossil-fuel related business capital in the included sectors. Given an average return on fossil fuel assets in global market portfolios of 4.7% between 2010 and 2020, this would reduce profitability of fossil fuel-related investments by more than half (in case the fossil fuel segment is 100%).

Table 1 – Business sectors for which the Carbon Capital Levy applies

Sector	Fossil fuel segment	Non-fossil fuel segment
Electricity generation	Electricity generation from fossil fuels	Electricity generation from energy other than fossil fuels
Oil and gas	Fossil fuel extraction and production	Energy production from sources other than fossil fuels
Construction	Construction of buildings powered by fossil heating (e.g. gas)	Construction of buildings powered by non-fossil heating (e.g. electricity, geothermal)
Automotive	Production of vehicles with internal combustion engine	Production of electric vehicles
Aviation	Use of fossil fuels	Use of alternative fuels
Shipping	Use of fossil fuels	Use of alternative fuels

Figure 1 – Example of an individual who owns $50 million in wealth, with 60% in business capital. In the proposed sectors, they own $3 million in an automotive company, whose vehicles are 83% fossil based. This results in a levy payment of $62,500 per year. Note that the bar heights are not to scale.



Effects of a Carbon Capital Levy

The levy, implemented worldwide, would raise around US$109 billion annually. Oxfam identified a potential 'coalition of the willing', consisting of 52 countries around the world. Implementing the levy within the coalition of the willing would raise around $47 billion annually. Both figures concern the first-order effect, without behavioural responses.

Around 75% of revenue is generated in high-income countries, with upper- and lower-middle-income countries respectively generating around 20 and 5% of revenue. Low-income countries generate merely 0.1% of revenue.

Table 2 – Estimated taxable persons, taxed capital and levy revenues of a Carbon Capital Levy

	Global implementation	Coalition of the willing
Taxable persons	1.4 million	0.5 million
Tax base	$47 trillion	$20 trillion
Levy revenue	**$109 billion**	**$47 billion**

The levy complements emissions trading systems. Emissions trading systems primarily incentivise companies to reduce their direct operational emissions. This levy instead targets the fossil energy use enabled by the products companies place on the market, including emissions that occur downstream in the value chain and are typically not covered by emissions trading systems. Examples include vehicles with combustion engines and housing with gas heating systems, which lead to fossil fuel use by end users. By combining emissions trading systems with the levy, both companies' own emissions and the downstream fossil energy use enabled through their products are addressed.

The Carbon Capital Levy comes with some possible unintended consequences:

- **The levy may result in unequal competition for different investors.** Specifically, investors from non-levy jurisdictions, investors below the wealth threshold and institutional investors are not subject to the levy. This can reduce the effectiveness of the tax. When investors subject to the levy sell their fossil assets, the price of these assets drops and investors not subject to the levy might opt to buy them. International cooperation can reduce some of the unequal competition.
- **Tax avoidance risks such as capital flight are possible but seem to be limited in scope**. Based on elasticities, we estimate that around 0.25% of high-wealth individuals moves to another jurisdiction when a country implements the levy.
- **Tax evasion through complex ownership structures might be possible.** High-wealth individuals may obscure their ownership of fossil-intensive assets by using holding companies, trusts, or layered corporate entities across multiple

jurisdictions. Effective enforcement requires transparency rules, reporting requirements, and international cooperation on beneficial ownership registers.

- **The tax burden may be partly passed on to workers and consumers.** However, this link is quite indirect. Moreover, based on scientific literature we did not find that capital taxation leads to higher consumer prices.

Conclusions and recommendations

The Carbon Capital Levy fills an important policy gap by directly targeting investments in fossil fuel-related activities. The levy serves a dual purpose: it generates public revenues while steering capital allocation away from fossil fuel-related investments.

We estimate that the profitability of fossil fuel-related capital could decline by more than half under a levy rate of 2.5%, suggesting that the instrument could effectively redirect investment away from fossil fuel-based companies. Relative to an individual's total wealth, the levy remains limited in scope. On average, the Carbon Capital Levy applies to only around 5% of total wealth, implying an effective wealth tax rate of approximately 0.12% (see Figure 1). This is an important consideration, as the relatively low effective rate may increase acceptability of the levy and reduces capital flight through relocation. At the same time, the low effective rate also implies that the levy is unlikely to substantially reduce wealth inequality. The effective rate could be increased either by raising the levy rate or by expanding the scope of the levy to additional sectors. However, such changes could also increase adverse effects such as capital flight and broader economic impacts.

Potential adverse effects include an uneven playing field between investors in participating and non-participating jurisdictions, and tax avoidance through complex international ownership structures. These effects reduce if more countries implement the levy and if international coordination on beneficial ownership registers improves.

Due to practical barriers, near-term implementation of the levy would be difficult. The main data and administrative gaps concern internationally coordinated systems for identifying ultimate beneficial ownership and internationally coordinated reporting methodologies for distinguishing fossil and non-fossil business activities. The latter could build upon existing taxonomies.

Recommendations:

- Further analysis is needed to assess the effectiveness and practical and legal feasibility of the levy in more detail.
- A gradual phase-in period is recommended to give investors and businesses time to adapt, with potentially longer transition periods for less liquid business assets such as private company ownership.

- Strengthening international transparency on beneficial ownership and improving information exchange between tax authorities would help improve enforceability of the levy.
- International coordination is important to improve effectiveness, reduce unequal competition between jurisdictions, and develop harmonised methodologies for reporting fossil and non-fossil business activities.

1 Introduction

1.1 Background

Oxfam is developing a policy toolbox of carbon-differentiated forms of taxation to better address greenhouse gas emissions in relation to income, wealth and capital ownership. The motivation for this work is that existing green tax instruments are often limited to emissions pricing at the level of production or to consumption-based taxes, but face challenges related to effectiveness, distributional impacts and tax avoidance.

As part of this work, Oxfam has developed a proposal for higher corporate taxation of fossil fuel companies, with tax rates differentiated according to the fossil fuel share of their activities. This approach focuses on profits derived from fossil fuel-related activities and aims to incentivise a shift in investment away from high-carbon production.

Building further on this corporate-focused instrument, Oxfam is now exploring additional carbon-differentiated tax options that apply to income and wealth. A Carbon Capital Levy links tax liabilities to the carbon intensity of the underlying economic activities and investments.

This work takes place against a backdrop of growing international attention to green and progressive taxation. Recent initiatives show that coordinated approaches applying to high-emission activities of high-income groups are feasible. An example is the emerging coalition of countries within the Global Solidarity Levies Task Force that are moving towards taxing first- and business-class air travel and private jets. These measures are designed to focus on the most carbon-intensive forms of air travel and primarily affect the highest-income travellers, while lower- and middle-income groups are largely unaffected. The Global Solidarity Levies Task Force is also exploring levies on fossil fuels.

CE Delft has previously conducted research for Oxfam and Milieudefensie on green and progressive tax instruments in the Netherlands, including an assessment of a carbon-differentiated wealth tax applying to investment-related emissions of high-wealth individuals. Building on this earlier work, Oxfam has requested CE Delft to carry out a new study on carbon-differentiated income and wealth taxation in an international context.

1.2 Objective and research questions

The central aim of this study is to explore design options for a Carbon Capital Levy that are both effective and feasible. Effectiveness is defined in terms of achieving two core policy objectives of such taxes: generating stable public revenue and incentivising a shift from carbon-intensive to low-carbon investment (the so-called double dividend hypothesis)[1]. A key condition of this green capital wealth tax is that the tax burden falls primarily on high-income and high-wealth individuals.

At the same time, the study assesses the practical feasibility of implementation, taking into account administrative complexity, legal constraints, and potential unintended consequences, such as capital flight, tax avoidance, and adverse impacts on consumers.

The research is structured around six core research questions that guide the proposed approach:

1. Building on existing work and best practices, how could a government design a Carbon Capital tax based on the level of fossil fuel component of the corporations from which income is earned (such as the level of fossil fuel-based energy provided by the relevant corporation)? What are the various options for doing so?
2. What level of levy rates could be feasible and optimal to raise significant revenue, and ensure that products relying on renewables are more profitable while avoiding negative consequences for the economy?
3. What would be the revenue potential for such a levy if applied globally or unilaterally by a small number of states?
4. How could the levy and/or complementary regulations and policies be designed to prevent unintended consequences, such as potential capital flight and risks of negative impacts on consumers and workers?
5. How might cooperation among a coalition of countries, but not including all major economies, enhance effectiveness of the levy?
6. How do such levies compare to potential regulation requiring phased decarbonisation of particular sectors? Are they more advantageous or disadvantageous? Should governments apply only one of these tools or do they have complementarities?

It should be noted that this levy proposal does not preclude the use of other instruments aimed at taxing carbon-intensive investment and emissions, such as corporate taxation, ETS, penalties for polluters, and other fiscal measures.

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[1] A double dividend of a green tax refers to the hypothesis that an environmental tax can provide two distinct benefits simultaneously. The tax discourages polluting activities, leading to improved environmental quality (e.g., lower emissions). By using the tax revenues to reduce existing distortionary taxes such as those on labor (income tax) or capital, the overall efficiency of the economy is improved, potentially boosting employment or GDP.

1.3 Carbon Capital Levy in policy context

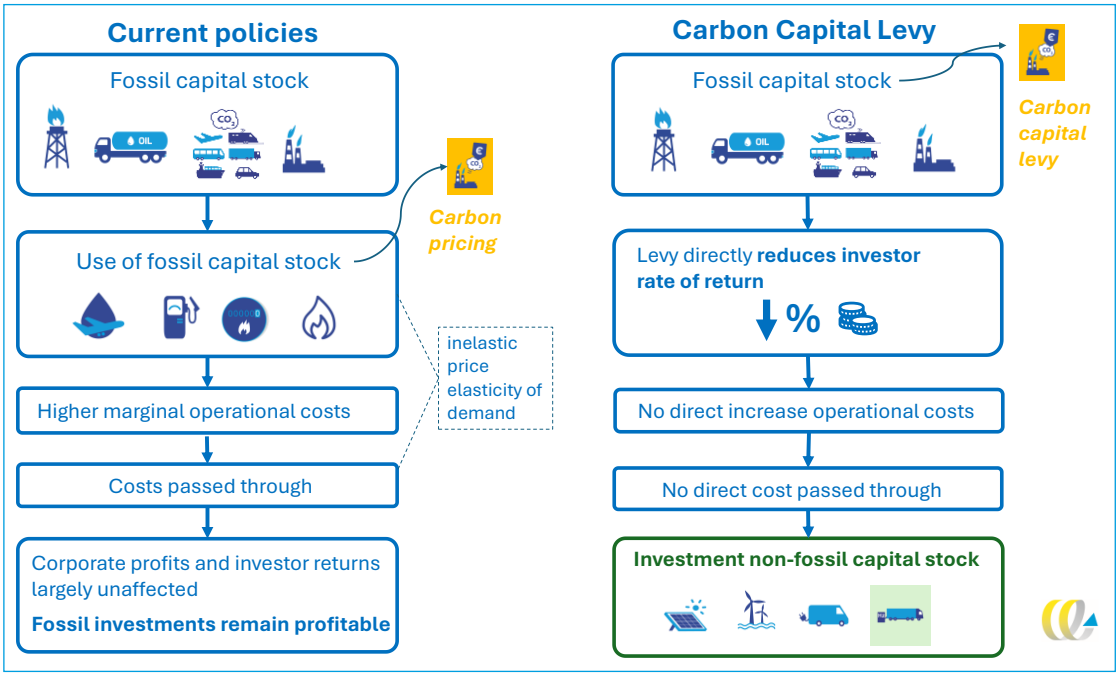
Over the past decades, a wide range of climate policies has been introduced to reduce greenhouse gas emissions. Globally, the most widely applied instruments are forms of carbon pricing, such as carbon taxation, emissions trading systems and energy taxation. These policies aim to reduce emissions by increasing the costs of using fossil fuels.

Despite this policy framework, investment in fossil-related activities remains substantial. This suggests that existing policy instruments are not fully effective in discouraging capital allocation towards fossil-based business models. A key challenge is that fossil investments are typically long-lived, with long lead times and asset lifetimes. Once capital is committed, these assets can operate for decades, locking in future emissions that may be incompatible with targeted emission pathways.

Current policies primarily increase the cost of emissions and energy use and affect marginal production costs, rather than directly affecting the profitability of underlying investments. The price elasticity of demand for fossil energy is often inelastic, allowing firms to pass through higher costs. As a result, the financial returns on fossil capital may remain strong, and these investments can remain attractive for investors.

The key difference is that the Carbon Capital Levy affects returns on capital rather than operational costs, making pass-through less direct. As a result, the Carbon Capital Levy is more likely to affect investment decisions than existing instruments, even if some degree of cost pass-through occurs. By taxing the fossil-dependent share of business ownership, the Carbon Capital Levy reduces the net rate of return on such investments. This creates a direct incentive for investors to reallocate capital away from fossil-related activities towards non-fossil alternatives, complementing existing policies that focus on emissions and energy use.

Figure 2 – How current carbon pricing policies and a Carbon Capita Levy affect investor returns



1.4 Outline of the report

Chapter 2 describes the design of the Carbon Capital Levy, including the tax base, levy rate, and liable individuals. Chapter 3 examines the effects of the levy, including revenue estimates, potential adverse consequences and possible mitigation measures, as well as comparisons with existing policy instruments. Chapter 4 discusses the practical and legal feasibility of the levy, and Chapter 5 presents the conclusions and recommendations.

2 Levy design

Summary of levy design

This chapter outlines the key design choices underlying the proposed levy. It describes to whom it is applied, which assets are included in the tax base, how fossil fuel dependency is defined and applied, and how the levy rate is determined. The most important design choices are listed below:

- applies to high-wealth individuals above a defined threshold (above US$5 million could be a possible threshold);
- tax base limited to business capital (private/public equity and investment portfolios), excluding other types of assets e.g. real estate, deposits, and luxury assets;
- only the fossil-fuel-dependent share of capital is taxed (non-fossil share excluded) to disincentivise fossil fuel investments;
- sector scope includes major emitting sectors: electricity and heat generation, oil and gas, construction, automotive, aviation and shipping;
- limited to investments in large firms (≥250 employees) for design feasibility and reducing administrative burden;
- flat levy rate of 2.5% per year on capital stock.

2.1 Tax base and liability

The Carbon Capital Levy only applies to high-wealth individuals

The Carbon Capital Levy is designed to apply only to high-wealth individuals, meaning that the majority of the population would not be liable. By introducing a threshold, only individuals whose business capital exceeds that threshold would be subject to the levy. This improves administrative feasibility by limiting the number of taxpayers and may also increase political acceptability. In addition, the levy targets wealth inequality, while leaving most households unaffected.

Most assets of high-wealth individuals are linked to business ownership

High-wealth individuals hold different types of assets. Below we distinguish the main asset categories held by high-wealth individuals (centimillionaires and billionaires) worldwide, based on data from Sweden (Bastani & Waldenström, 2023) and the USA (US Federal

Reserve, 2016). Table 3 shows that the majority of assets relate to business ownership (private, public, investment portfolios).

Table 3 – Type of wealth owned by centimillionaires and billionaires worldwide

Asset categories	% of total assets
Private business ownership	40–60%
Publicly listed business ownership[2]	10–25%
Investment portfolios, including small shareholdings, investment funds, hedge funds and Exchange Traded Funds (ETFs)	5–15%
Real estate, both commercial and residential	5–20%
Bank deposits and other liquid assets	<5%
Luxury goods such as cars, yachts and art	<5%

Difference between wealth and capital

In designing the tax base, it is important to note that wealth and capital, while closely related, are distinct concepts. *Wealth* refers to the total value of financial and non-financial assets owned by an individual, minus liabilities. All categories in Table 3 are considered wealth categories. *Capital* is a subset of wealth. It refers to assets that are held or used with the aim of generating income or capital gains.

Private and public business ownership and investment portfolios fall under capital by definition. They are primarily held to generate profits, dividends or capital gains. Commercial real estate and bank deposits can also be considered capital, as they generate income via rent and interest. Wealth that is not related to generating income or gains, such as residential real estate and luxury goods, are not considered capital.

This levy applies to capital related to business ownership. It includes private and public business ownership and other types of investment related to business ownership. The levy excludes other types of capital such as bank deposits and commercial real estate.

This levy applies to capital related to business ownership

This levy proposal applies to the carbon footprint associated with business ownership by high-wealth individuals. It adopts a production-based approach to carbon emissions, meaning that emissions are attributed to the owners of firms that generate pollution. This differs from the more common consumption-based approach, where emissions are assigned to the consumption of goods and services. We have chosen for this approach because business ownership is the prime lever for decision making in companies.

This production-based perspective leads us to propose taxation on private and public business ownership and on investment portfolios (first three asset categories in Table 3).

[2] Publicly listed business ownership with substantial stake.

At the same time, luxury goods, bank deposits and real estate are not taxed, even when they support business activities. This is because in the production-based perspective, carbon emissions are allocated to business ownership.

This fits well with where the majority of emissions from high-wealth individuals stem from. Consumption patterns of billionaires certainly cause high carbon emissions, with usage of private jets, yachts and large amounts of electricity. However, the emissions stemming from their business ownership are much larger under the production-based perspective (Greenpeace, 2024; Rehm & Chancel, 2022). In addition, such consumption can be addressed through specific levies on areas such as private jets, super-yachts and premium travel.

In fact, under production-based accounting, carbon emissions are even more unequally distributed than under consumption-based accounting, with the richest 1% emitting more than 20 times as much carbon per person than the poorest 50% (CE Delft, 2025). In other words, business ownership appears to drive a larger share of inequality in emissions than personal consumption alone.

Table 4 – Assets taxed under the Carbon Capital Levy

Types of assets	Taxed under the Carbon Capital Levy
Private business ownership	Yes
Public business ownership	Yes
Investment portfolios[3]	Yes
Bank deposits	No
Real estate	No
Luxury goods	No

We apply the concept of ultimate beneficial ownership, whereby the ultimate economic owner is held accountable for their emissions and intermediate legal structures such as holdings, trusts, and special purpose entities are disregarded for tax purposes.

Possible thresholds for tax liability

To ensure that the levy applies only to high-wealth individuals, a threshold is introduced. Individuals whose business capital exceeds this threshold are liable for the levy, while those below the threshold are exempt. The threshold is based not on total personal wealth, but specifically on the total value of business capital held by an individual.

[3] This includes all types of investment instruments linked to business ownership, such as ETFs, mutual funds, hedge funds, and private equity funds. It excludes synthetic investments. Synthetic investments are financial instruments, such as derivatives and swaps, that provide exposure to the performance of underlying assets without conferring direct ownership. As they do not represent business ownership, these instruments fall outside the scope of the tax.

One possible threshold is business capital valued at $5 million. Globally, this group comprises roughly 1.4 million[4] individuals (about 0.02% of the population), who hold around $47 trillion in business capital.[5]

A higher threshold of $10 million would narrow the group to around 700,000 individuals (approximately 0.01% of the population), accounting for a total business capital of about $42 trillion.

Raising the threshold further to US$50 million reduces the population to roughly 150,000 individuals (around 0.002%), who together hold an estimated $30 trillion in business capital.

At the top end, a threshold of US$100 million, applying to centimillionaires, would apply to approximately 80,000 individuals worldwide (about 0.001%), with a combined business capital of around $27 trillion.

Taxing capital stock versus capital income

There are two main options for taxing business ownership. The tax can be levied on the ownership itself (capital stock), or on income derived from business ownership (capital income).

Taxing capital income has several advantages. First, it is easier to implement. Most countries already have capital income taxes in place. Administrative systems are therefore largely available. In contrast, recurrent taxes on capital ownership are relatively rare.

Second, capital income is often easier to observe than capital stock. Dividends, interest and realised capital gains are recorded transactions. Valuing the underlying stock of capital, especially private company shares, is more complex. In practice, the amount of wealth held by individuals is often inferred from their capital income flows, as noted by Advani & Summers (2024).

However, taxing capital income also has important disadvantages compared to taxing capital stock. The tax base is much smaller. Capital income represents only a small fraction of capital stock. For the wealthiest individuals, a large share of capital accumulation takes place through increases in the value of business assets that are not sold. As long as assets are held and no capital income is generated, no tax is paid. This reduces the effectiveness of the tax in addressing wealth inequality.

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[4] Data on the number of individuals and total accumulated wealth follows from World Inequality Database data and UN population data. It does not necessarily match popular figures mentioned online, such as 30,000 centimillionaires existing worldwide (Henley & Partners, 2024).

[5] This means that only individuals whose business capital exceeds the threshold would be subject to the tax. For example, if the threshold were set at $5 million, a person with a total wealth of $10 million, of which $6 million is invested in business capital, would be tax liable. In contrast, a person with a total wealth of $6 million, consisting of $1.5 million in real estate, $0.5 million in bank deposits, and only $4 million in business capital investments, would not be subject to the levy.

Tax revenues are also more volatile with a capital income tax. Capital income fluctuates with economic conditions and financial markets. In downturns, dividends and capital gains may fall sharply. Capital stock also fluctuates in value, but typically less strongly than annual income flows.

In summary, taxing capital income is administratively simpler and builds on existing systems. Taxing capital ownership has a broader and more stable base, generates more revenues and may be more effective in addressing wealth concentration.

This study chooses a capital stock approach

In the remainder of this study, the levy is based on capital stock rather than capital income. The main reason for this choice is that taxing capital stock provides a broader tax base, generates more stable revenues, and has a stronger effect on reducing wealth inequality than taxing capital income.

Countries may choose to adopt a different approach by taxing capital income rather than capital stock, or by implementing a combination of both, if this is considered more desirable or more feasible in practice.

2.2 Carbon differentiation

Taxing only fossil fuel-dependent capital

In addition to addressing wealth inequality, a second objective of the levy is to incentivise a shift in capital allocation away from fossil fuel-dependent businesses and towards businesses that do not rely on fossil fuels. This can be achieved by taxing only the share of capital associated with fossil fuel-dependent activities. As a result, investments in businesses that are not reliant on fossil fuels become relatively more attractive and profitable.

This design can trigger several behavioural responses:

- Investors may reallocate investments from fossil fuel-dependent businesses towards businesses that do not rely on fossil fuels (substitution).
- Investors may encourage firms to reduce their dependence on the sale of goods and services running on fossil fuels.
- Investors may demand higher gross returns (before taxation) on fossil fuel-intensive investments (lowering capital supply).

If investors require higher returns, the cost of capital for firms increases, reducing profitability. These higher costs may be passed on along the value chain. On the one hand, this can have a positive effect by increasing the price of fossil fuel use and fossil-dependent products, thereby encouraging firms further down the chain and consumers to switch to low-carbon alternatives. On the other hand, it may contribute to higher consumer

prices. Potential negative consequences due to the levy are further discussed in Chapter 3.

Investors may also choose to shift from capital to forms of wealth that are not subject to the levy, such as savings or real estate. The upside is that it reduces investment in fossil fuel-related capital. Downsides are that real estate can still be associated with greenhouse gas emission, and a broader shift towards bank savings may reduce productive investment in the economy.

How to tax fossil fuel-dependent capital

Taxing only the share of capital based on fossil fuel use requires a clear definition of what is considered fossil fuel dependent and what is not. In this proposal, we therefore limit the scope of the levy to sectors that cause a large share of worldwide greenhouse gas emissions and where a clear distinction can be made between fossil and non-fossil activities. These sectors are as follows:

- oil and gas;
- electricity and heat generation and utilities;
- construction;
- automotive;
- aviation;
- shipping.

Together, these sectors accounted for 77% of worldwide CO_2 emissions in 2023 (Our World in Data, 2026).[6]

The scope of sectors covered by the levy can be expanded over time. Some of the priority sectors for consideration among expansion could be: heavy industry, mining, manufacturing, and banking, as these sectors either generate significant greenhouse gas emissions (heavy industry, manufacturing), are directly involved in fossil fuel extraction (mining), or finance investments in fossil fuels (banking).

Defining fossil fuel dependent share of sectors

We link fossil fuel dependency to physical activity. For each sector the fossil fuel segment is calculated differently. Table 5 defines, for each sector, the distinction between fossil fuel-dependent and non-fossil fuel-dependent activities.

[6] This is based on CO_2 emissions from electricity and heat generation, transport, aviation and shipping, and buildings. Oil and gas is not included in this calculation as a separate sector.

Table 5 – Defining fossil fuel dependent share per sector[7]

Sector	Fossil fuel segment	Non-fossil fuel segment
Electricity generation	Electricity generation from fossil fuels	Electricity generation from energy other than fossil fuels
Oil and gas	Fossil fuel extraction and production	Energy production from sources other than fossil fuels
Construction	Construction of buildings powered by fossil heating (e.g. gas)	Construction of buildings powered by non-fossil heating (e.g. electricity, geothermal)
Automotive	Production of vehicles with internal combustion engine	Production of electric vehicles
Aviation	Use of fossil fuels	Use of alternative fuels
Shipping	Use of fossil fuels	Use of alternative fuels

In the **electricity generation sector**, the fossil segment consists of electricity produced from fossil fuels, including oil, gas, and coal. The non-fossil segment includes electricity generated from non-fossil sources such as renewables (e.g. wind, solar, hydro) and nuclear energy.

In the **oil and gas sector**, the fossil segment covers the extraction and production of fossil fuels. The non-fossil segment includes energy production from non-fossil sources undertaken by these companies, such as hydrogen production and other low-carbon or renewable energy activities.

In the **construction sector**, the fossil segment includes the construction of buildings that are powered by fossil heating (e.g. gas), while the non-fossil segment consists of buildings powered by non-fossil heating (e.g. electricity, geothermal). Defining the segments in this way provides an incentive to accelerate the development and adoption of buildings powered by non-fossil heating.

In the **automotive sector**, the distinction is based on vehicle production. The fossil segment consists of the production of vehicles with internal combustion engines, while the non-fossil segment includes the production of electric vehicles. The levy explicitly applies to manufacturers, as they determine the type of vehicles produced. Vehicle users are not affected, as this would not align with the focus of this proposal on taxing business ownership, and it would directly affect a large share of the global population.

[7] The distinction between fossil and non-fossil segments includes grey areas that require further consideration in the practical design of the tax. For this analysis, the focus remains on the high-level differentiation between fossil and non-fossil activities.

In the **aviation and shipping sectors**, the distinction is based on fuel use rather than manufacturing, as electric aircraft and vessels are currently almost non-existent. The key factor determining fossil fuel dependency is the type of fuel used, rather than the type of vehicle. Decisions on fuel use are made by airlines and shipping companies, not by manufacturers. Unlike the automotive sector, fuel users in these industries are predominantly businesses, such as airlines and shipping companies, rather than individual consumers. This aligns with the focus of this proposal on taxing business ownership. In the future, this approach could be expanded or adjusted to also include the manufacturing of electric aircraft and vessels, in order to stimulate innovation in alternatives that do not rely on fossil fuels or biofuels (because the latter compete in most cases with food production).

Other possible ways to define fossil fuel segment

In Table 5, the fossil fuel segment is defined based on a description of the physical activities of the taxed business capital. For example, if a car manufacturer derives 60% of its activity from electric vehicles and 40% from vehicles with internal combustion engines, then only 40% of its total capital would be subject to the levy, while the remaining 60% would be exempt. The main advantage of this approach is that it closely reflects the actual operations of the company. A disadvantage, however, is that the fossil fuel segment must be determined differently across sectors, requiring sector-specific definitions to distinguish between fossil and non-fossil activities.

An alternative approach is to define the fossil fuel segment on the basis of revenue shares. Under this method, the taxable share of a company corresponds to the proportion of its turnover derived from fossil fuel-related activities, while the remaining share is exempt insofar as it originates from non-fossil activities. For example, if an oil company derives 95% of its revenues from oil and gas activities and 5% from solar energy, wind energy, and electric vehicle charging infrastructure, then 95% of the company's capital would fall within the scope of the levy.

This approach is more consistent across sectors and has the advantage that turnover by business segment is typically disclosed in financial statements and subject to audit. A limitation, however, is that the distinction between fossil and non-fossil turnover is not always straightforward and may lead to debates.

Another alternative approach would be to apply definitions in line with existing taxonomies, such as the EU Taxonomy (See Text box 1). Instead of requiring companies to report a fossil fuel share, the tax base could be determined based on the share of activities that are not taxonomy-aligned. In this approach, taxonomy-aligned activities can be treated as non-fossil, while non-aligned activities serve as a proxy for fossil fuel dependency. This builds on existing definitions and might therefore be more feasible to implement.

It should be noted that what classifies as ‘EU Taxonomy-aligned’ is also subject to debate. A specific limitation is that certain fossil-based activities, such as natural gas, can be classified as ‘transitional’ and taxonomy-aligned if they meet certain emission thresholds. Also, a group of NGOs are taking the EU Commission to court over EU Taxonomy criteria that label airplanes and ships with extensive fossil fuel use as Taxonomy aligned.

Text box 1 – EU Taxonomy

EU Taxonomy

The EU Taxonomy is a classification system developed by the European Union to define which economic activities can be considered environmentally sustainable. It was established under Regulation (EU) 2020/852 as part of the EU’s sustainable finance framework.

An activity is taxonomy-aligned if it substantially contributes to at least one environmental objective, does no significant harm to others, meets minimum social safeguards, and complies with technical screening criteria.

The framework is used to guide investment decisions, improve transparency and comparability of sustainability information, and support sustainability reporting under regulations such as the Sustainable Finance Disclosure Regulation (SFRD) and Corporate Sustainability Reporting Directive (CSRD). It applies mainly to large EU companies (public and private) and financial institutions, and to some non-EU companies with significant EU activities.

Companies in scope must disclose the share of turnover, capital expenditure, and operating expenditure that is taxonomy-aligned.

Source: EC (2024).

Threshold for the size of companies

Applying the levy to all companies worldwide would create substantial administrative complexity. To enhance feasibility, we recommend limiting the scope to large firms. This reduces the number of entities subject to the levy and makes administration more manageable.[8]

Several options exist for defining firm size, including turnover, total assets, and number of employees. For instance, the EU Corporate Sustainability Reporting Directive (CSRD) classifies large undertakings based on a combination of employee thresholds and minimum turnover levels.

[8] In addition, to avoid including companies with only a marginal fossil fuel footprint, a threshold of 10% could be introduced. Under such an approach, only companies for which at least 10% of activities are fossil fuel-dependent would fall within the scope of the levy, while companies below this threshold would be fully exempt.

In the calculations presented in Chapter 3, we set the size threshold at 250 employees, meaning that only firms exceeding this threshold are included in the tax base. This choice is primarily driven by data availability, as OECD business statistics are reported by size class using this cutoff.

It is important to note that the 250-employee threshold is used only for calculation purposes. In practice, we do not recommend relying solely on the number of employees, as this may create incentives for firms to reduce headcount. A more robust approach would combine multiple criteria, such as employees, turnover, and/or total assets, similar to the CSRD framework.

When applying the company size threshold on turnover, we recommend it is no higher than $50 million (equal to the initial CSRD threshold before the EU Omnibus Directive was adopted) to ensure enough companies are in scope. Jurisdictions may want to customise the threshold based on the number of companies that would be above/below the threshold.

2.3 Levy rate

Linking the levy rate to levy objectives

We recall that the objectives of the levy are to generate substantial revenue, encourage investment in non-fossil business activities, and avoid adverse economic impacts.

To explore which levy rate steers business capital away from fossil-fuel related businesses, we initially attempted to link the levy rate to differences in returns between fossil and non-fossil investments. This involved comparing return differentials between fossil energy indices (S&P and MSCI) and indices excluding fossil fuels. The methodology is described in Annex A.1. However, this approach proved unsuitable as a basis for determining the levy rate. Empirical data from S&P and MSCI do not indicate that fossil-based activities are consistently more profitable than non-fossil alternatives in the long term.

We propose a levy rate of 2.5% per year on the value of fossil-fuel related business capital

In order to assess what the behavioural effects and economic distortions of a levy rate are, we should also look at expected returns on capital. If a levy rate covers a large share of expected returns, capital relocation towards other investments will be higher than if the levy rate covers only a small fraction of expected returns on capital.

Between 2010 and 2020, annual average returns on fossil fuel assets in global market portfolios were approximately 4.7% (IEA, 2021). Returns vary across sectors and over time.

If we take the 4.7% as a proxy for the return on fossil fuel-related business capital, this implies that a levy rate of 2.5% reduces profitability of this capital by more than half. This is likely to influence investment behaviour towards non-fossil business activities. At lower rates, such as 1%, profitability of fossil-fuel assets is reduced much less and behavioural effects may be more limited. At higher rates, for example 5% per year, the levy rate exceeds average expected capital returns and there is a likelihood that net returns become negative for a wide range of investments, leading to a real decline in wealth. This increases the risk of economic distortions, such as reduced investment and capital flight. We consider a rate of 2.5% to be a suitable central scenario. As a sensitivity analysis, we also estimate levy revenues under rates of 1 and 5% per year.

For practical reasons, we propose a flat levy rate. Alternatively, a progressive rate structure could be applied, with higher rates for larger wealth brackets, thereby strengthening the redistributive effect.

3 Levy effects

Summary of levy effects

- The annual revenue of the levy would be around $109 billion in the case of global implementation.
- When a coalition of the willing of 52 countries implements the levy, the revenue would be around $47 billion.
- If the levy is implemented in some countries but not in others, differences in tax treatment may reduce its effectiveness by creating an uneven playing field for investors from different jurisdictions. International cooperation can mitigate this negative consequence of the levy.
- Tax avoidance through migration is expected to be less than 0.25%.
- Tax evasion risks might occur and require effective mitigation.
- Part of the tax burden might be passed on to workers and consumers, but cost pass-through is probably lower compared to climate policies such as carbon pricing and ETS that directly increase the cost of production.
- A Carbon Capital Levy and emissions trading systems complement each other by stimulating cuts in downstream emissions, as well as emissions in the sectors themselves.
- A Carbon Capital Levy can complement capital income taxation by adding another redistributive layer which incentivises investors to move away from fossil investments.

This chapter considers the effects of the Carbon Capital Levy. First, we show the potential revenue it can raise, both when globally implemented and when implemented in 52 countries forming a coalition of the willing. Then, we identify potential unintended consequences of the levy and how policy and design choices can limit these. Finally, we relate the Carbon Capital Levy to other policy measures, such as emissions trading schemes and capital income taxation.

3.1 Levy revenue

In determining the levy revenue, it is relevant to repeat that the levy applies to:

- the capital of high-wealth individuals;
- identified sectors with a clearly defined fossil segment;
- the fossil segment of these sectors;
- companies above a certain size.

To calculate the revenue the levy generates, we first determine **the total capital held by high-wealth individuals**. For this, we used wealth data from the World Inequality Database, population data from the UN, and data on capital ownership by high-wealth individuals from the USA and Sweden. Then, we calculate the **share of capital in the proposed sectors with a fossil segment** by looking at market capitalisation data. Subsequently, we determine **the fossil segment** of these sectors with data from various sources. Finally, we find the **share of companies with more than 250 employees** in these sectors using OECD data.

The equation for determining the tax base is as follows:

$$Tax\ base = Capital\ held\ by\ wealthy * Share\ of\ company\ value\ in\ proposed\ sectors \\ * Share\ of\ fossil\ segment\ (within\ relevant\ sectors) \\ * Share\ of\ companies\ (within\ relevant\ sectors) > 250\ employees$$

For the last three terms, the values below are used. They are calculated in Annex A.2, using, among others, market capitalisation data and OECD data on company size.

Table 6 – Values used in the calculation. Figures presented here are averages. In the calculation, we use different values for different sectors.

Part of calculation	Value used
Share of company value within proposed sectors	13%
Average share of fossil segment	86%
Average share of companies with more than 250 employees	83%

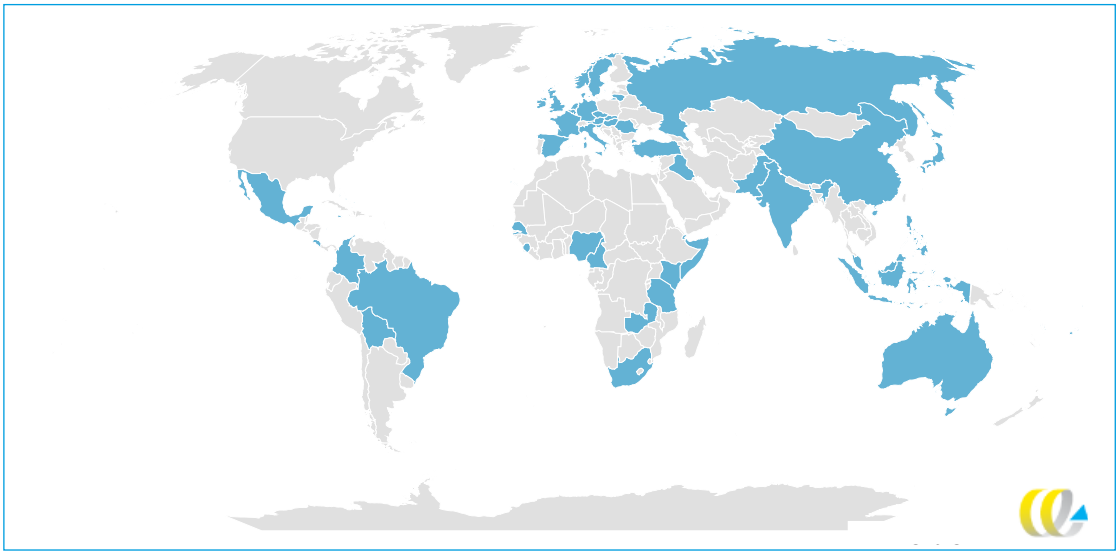
The levy revenue is obtained by multiplying the tax base by the levy rate. This gives the effect without behavioural responses. These responses are qualitatively described in the chapter but not quantified. For further details of the calculation, see Annex A.2.

Which countries will implement the levy?

In this study, we calculate the revenue for two scenarios: one in which the levy is adopted globally, and one in which a coalition of the willing of 52 countries[9] adopts the levy. These countries were provided by Oxfam based on Oxfam's determination that these are countries that are more likely than others to be part of such a coalition.

[9] The coalition of the willing includes the following 52 countries: Australia, Austria, the Bahamas, Barbados, Belgium, Bolivia, Brazil, Cameroon, China, Colombia, Costa Rica, the Czech Republic, Denmark, Djibouti, Fiji, France, Germany, Hungary, Indonesia, Iraq, India, Ireland, Italy, Jamaica, Japan, Kenya, Lithuania, Malaysia, the Marshall Islands, Mexico, the Netherlands, Nigeria, Norway, Pakistan, the Philippines, the Republic of Korea, Romania, the Russian Federation, Senegal, Sierra Leone, Slovakia, Slovenia, Somalia, South Africa, Spain, Sweden, Türkiye, Tuvalu, the United Kingdom of Great Britain and Northern Ireland, the United Republic of Tanzania, Vanuatu, and Zambia.

Figure 3 – Map of coalition of the willing



According to UN population data and World Inequality Database wealth data, the coalition of the willing includes around 66% of the world's population and 57% of the world's personal wealth.

How much revenue will it generate?

Here, revenues are presented for the main scenario of a threshold of $5 million in capital, and a levy rate of 2.5%. In Annex B, we show revenues for thresholds of $10, $50 and $100 million in capital, and for levy rates of 1 and 5%.

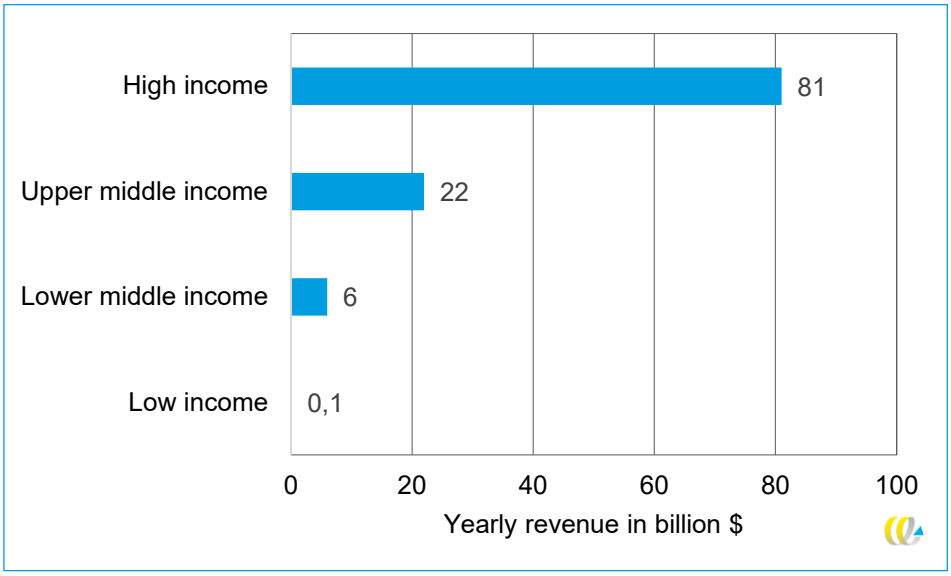
We estimate the yearly revenue of a Carbon Capital Levy with a levy rate of 2.5% and a capital threshold of $5 million to be $109 billion under global implementation, and $47 billion when implemented by the coalition of the willing.

Table 7 – Estimated taxable persons, taxed capital and levy revenues of a Carbon Capital Levy

	Global implementation	Coalition of the willing
Taxable persons	1.4 million	0.5 million
Tax base	$47 trillion	$20 trillion
Levy revenue	**$109 billion**	**$47 billion**

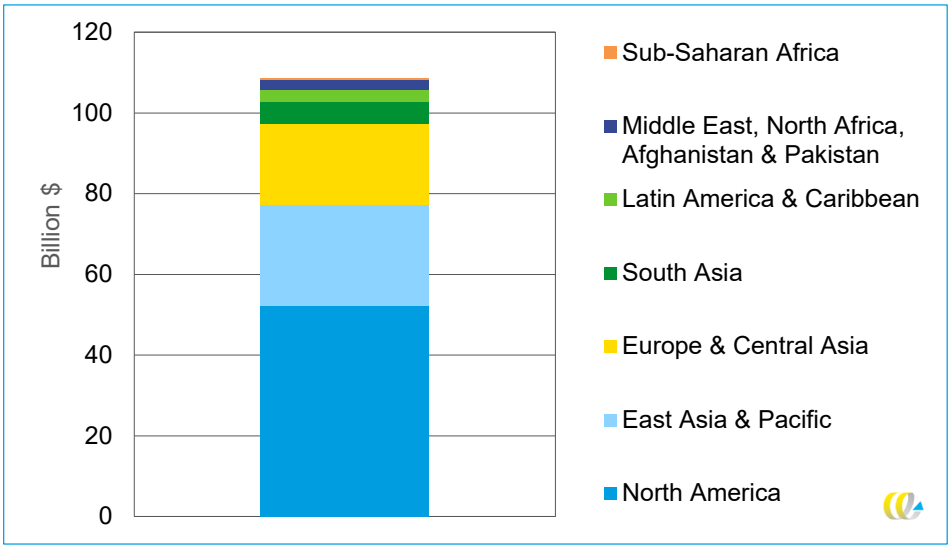
Around three quarters of the revenue in case of global implementation comes from high-income countries, with upper-middle-income countries contributing around one-fifth of revenue. Lower-middle-income countries contribute around 5%, while low-income countries contribute merely 0.1%.

Figure 4 – Levy revenue per country income group



Almost half of the revenue ($52 billion) is generated in North America, almost all of which from the USA. East Asia & Pacific and Europe & Central Asia regions are close to each other in revenue, with $25 and $20 billion, respectively. The remaining $12 billion in revenue is generated in other regions.

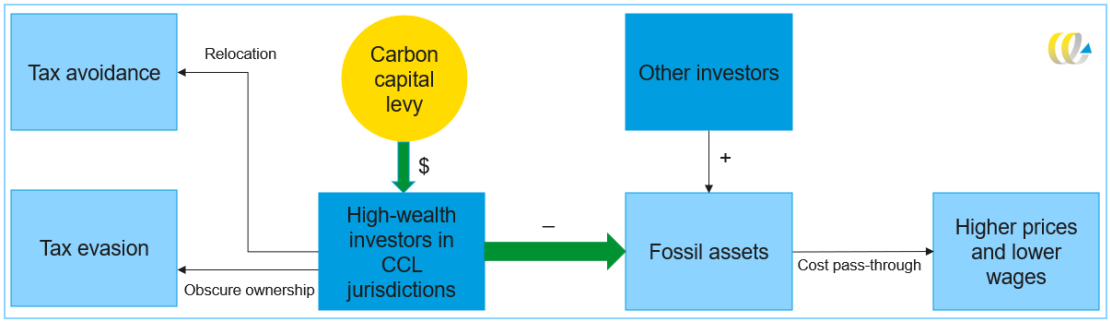
Figure 5 – Levy revenue per world region



3.2 Unintended consequences

In this chapter, we describe several potential unintended consequences. This includes unequal competitive conditions between countries, tax avoidance and evasion risks, and cost pass-through to workers and consumers. We discuss how design choices, additional policy measures, and the role of international cooperation could reduce the negative consequences. An overview of the unintended consequences can be found in the figure below.

Figure 6 – Unintended consequences (black arrows) and intended consequences (green arrows) of the Carbon Capital Levy



Unequal competition undermines effectiveness

The levy can cause unequal competitive conditions between investors. High-wealth investors in jurisdictions with a Carbon Capital Levy are taxed, but the following investors are not (non-liable investors):

- investors in countries without a Carbon Capital Levy;
- investors who do not meet the capital threshold;
- institutional investors such as state funds and pension funds.

Investors subject to the Carbon Capital Levy generate lower returns on their fossil investments. This reduces the demand for fossil stocks, thereby lowering their market price. This makes fossil investments more attractive to non-liable investors, who see lower market prices but do not incur Carbon Capital Levy costs. In this way, the unequal competitive conditions undermine the effectiveness of the levy in shifting to green investments. Furthermore, these conditions could create perceived unfairness in international capital markets. It should be noted, however, that this mainly applies to publicly traded capital, which can be bought and sold relatively easily, and less so to capital held in private companies, which is generally more illiquid. Table 1 shows that only around one third of business capital of centimillionaires and billionaires is publicly traded.

International coordination of the levy can mitigate this problem, as unequal competitive conditions between countries are removed when more countries implement the levy. However, the unlevel playing field for high-wealth investors compared to less wealthy investors below the capital threshold and institutional investors cannot be easily mitigated.

Tax avoidance or evasion

Another negative consequence of the levy is tax avoidance through capital flight. High-wealth individuals could respond to the levy by relocating to jurisdictions without such a policy. These individuals would then avoid the levy, without having to change the business-related capital they hold. This is because the jurisdiction in which the individual resides determines whether they are liable, not the jurisdiction where the companies are based. Especially very high-wealth individuals (e.g. centimillionaires and billionaires) could easily relocate, as they already own or can afford residential properties in multiple jurisdictions. However, existing literature finds that large-scale relocation is generally limited, as moving countries involves substantial personal and economic costs (Friedman et al., 2024).

Empirical elasticities also suggest relocation due to changes in wealth taxation is limited. Based on empirical data from Denmark and Sweden, Jakobsen et al. (2024) estimate that a 1% increase in the top wealth tax rate decreases the number of high-wealth taxpayers by under 2%. However, the tax base of the Carbon Capital Levy is only around 5% of total wealth, on average.[10] This makes the effective wealth levy rate on an average portfolio quite small, around 0.12%. Based on the aforementioned elasticity, this suggests relocation of less than 0.25% of high-wealth taxpayers.

If the relocation of high-wealth individuals is deemed undesirable, there are possible policy options to reduce this risk. An exit tax can be introduced, which taxes capital ownership at a certain rate (for instance 10%) when taxpayers move their residence abroad. Another possibility is to let individuals be liable for taxes in their home country for a few years after relocating.

It is possible that high-wealth individuals will attempt tax evasion by creating complex ownership structures, such as holding companies, trusts, or layered corporate entities across multiple jurisdictions. These structures do in fact not alter tax liability, as the ultimate beneficial owner of the assets is tax liable. The ultimate owner of the capital would be legally required include all their capital on their tax returns.

However, such structures may be used to obscure ownership of fossil-intensive companies. This makes it more difficult for tax authorities to identify the ultimate beneficial owner. To complicate matters, many countries do not have beneficial ownership registers in place. Effective enforcement would therefore require transparency rules, reporting

[10] The Carbon Capital Levy only applies to capital (around 52% of wealth, see Annex A.2.1), to a limited number of sectors (13%), their fossil parts (86%), and large enough companies (82%).

requirements, and international cooperation on beneficial ownership registers. Additionally, significant penalties and robust monitoring may disincentivise this criminal behaviour.

Tax burden might be passed on

Finally, part of the tax burden on capital may be passed on to other economic actors. One such actor could be consumers. If investors require higher returns to compensate for the levy, companies may face higher costs of capital and may seek to pass part of these costs on through higher prices. However, compared with instruments such as carbon pricing or ETSs, where production costs are directly increased at the firm level, the cost pass-through of a Carbon Capital Levy is likely to be more indirect and may therefore be lower. This is because the levy is imposed on individuals holding capital, rather than on companies. Any increase in business costs would therefore arise indirectly through changes in investor behaviour and financing conditions.

The cost-pass-through rate of capital taxation to higher prices has not been widely studied and it is difficult to estimate by how much prices may rise. As previously discussed, higher prices for fossil-based products and services may motivate consumers to choose sustainable alternatives. However, it also reduces their purchasing power and the amount of goods they can afford.

The tax burden might also be passed on to workers. It has been estimated that between 18 and 47% of capital income taxation[11] may ultimately be borne by workers through lower wages (CAN Europe & T&E, 2026). While this is in principle undesirable, this does make fossil companies less attractive to work for.

We do not see any desirable policy options to reduce the risks of passing on the tax burden. Governments can however use the proceeds of the tax to subsidise the uptake of sustainable alternatives, including through payments to individuals, such as for purchases of heat pumps or through expansion of public services such as electrified public transport, as well as reducing net taxes on lower-income groups.

Capital income could be adjusted

The Carbon Capital Levy considered in this study focuses on taxing capital ownership. While taxing capital income instead would be possible, a levy on capital ownership has the advantage of being less sensitive to certain tax avoidance strategies. Capital income can sometimes be deferred or transformed into other types of income. For example, a company owner may choose to retain profits within the company instead of distributing them as dividends, postponing the moment at which capital income becomes taxable. This can be realised through share buybacks, for example. Additionally, profits can be

[11] This estimate does not *directly* apply to the Carbon Capital Levy, as we are focusing on taxing capital ownership instead of taxing capital income.

reinvested in the company or used to provide benefits in kind, which can reduce the amount of capital income that is immediately subject to the levy.

3.3 Interaction with other policy instruments

Carbon Capital Levy makes (investing in) high-carbon activities less attractive through taxing capital or capital gains. We compare the levy to a decarbonisation policy (ETS) and to capital income taxes. We describe how the Carbon Capital Levy compares to and differs from these instruments and how it complements them.

Policy instruments increasing cost of high-carbon activities

There are several policy instruments that increase the cost of fossil energy use, such as taxes on electricity or fossil fuels, taxes on CO_2 or other greenhouse gas emissions, and ETS. Here, we compare the Carbon Capital Levy with ETS. We use ETS as the reference instrument because it has a large scope, has been implemented in multiple jurisdictions, and its effectiveness has been widely studied.

An ETS is a market-based instrument to reduce CO_2 emissions. Firms must acquire allowances for their emissions and can trade these with one another, which gives emissions a price. As a result, activities with lower emissions become relatively more profitable, since reducing emissions lowers the costs firms face under the ETS. Currently, 42 ETS are in place worldwide, with the highest revenues coming from ETS from the EU, Germany[12], California, and the UK (ICAP, 2026).

Table 8 – Differences between Carbon Capital Levy and ETS

	Carbon Capital Levy	**ETS**
Who pays?	High-wealth individuals	Companies in specific sectors
What company activities are taxed?	Fossil part of operations	Direct (Scope 1) emissions (generally)
Costs increased for companies	Cost of capital	Operating costs

[12] Germany operates a national emissions trading system covering emissions in the buildings and road transport sectors that fall outside the scope of the EU ETS1. The system is intended to be gradually replaced by the EU ETS2 from 2027/2028 onwards.

ETS and Carbon Capital Levy complement each other

Although ETS have been around for 20 years, fossil products are still being invested in heavily. This is, among others, due to the following reasons:

1. ETS increases operating costs. These costs can often be passed on, because demand for fossil energy is relatively inelastic (see also Section 1.3). Thus, profit margins stay intact.
2. ETS covers the direct emissions of production installations but does not cover downstream emissions caused by the products. For example, combustion engine manufacturers are not linked to car fuel use under ETS. Similarly, construction companies are not linked to fossil fuels used in heating under ETS. Therefore, such companies have limited incentive to switch to non-fossil alternatives. This can lead to lock-in situations with a relatively large number of fossil assets in the mix, with consumers having limited ability to reduce fossil fuel use.
3. Uncertainty around ETS prices leads to investments being postponed. For instance, in the EU ETS context, discussions to make the system more lenient are taking place. In response, market prices for allowances have dropped.

The Carbon Capital Levy is not hampered as much by these drawbacks, because:

1. The relationship between the Carbon Capital Levy and prices is not as direct. The levy applies to high-wealth investors, who might in turn demand higher returns, increasing costs of capital for fossil companies. Higher costs of capital might, in the long run, lead to higher prices. However, the levy does not directly increase marginal production costs, whereas ETS does. Therefore, costs are less likely to be passed on and more likely to be borne by (investors in) fossil companies.
2. The Carbon Capital Levy covers the fossil parts of companies, even when the actual emissions occur downstream in the value chain.
3. The levy rate is set and does not fluctuate, so that investors know exactly at what rate their fossil assets will be taxed.

Targeting direct emissions, as ETS does, also comes with advantages. Not all fossil activities are created equal: burning coal harms the environment much more than burning natural gas. Therefore, under ETS, burning coal is more expensive. The Carbon Capital Levy does not have a such mechanism. Additionally, ETS can apply to fossil fuel use in all sectors and thus reduce fossil dependency in all these sectors. The Carbon Capital Levy, on the hand, promotes divestment in specific carbon-intensive sectors.

In summary, ETS and the Carbon Capital Levy complement each other's weaknesses. By implementing both of them at the same time, there is both an incentive for companies to switch to processes with a lower carbon-intensity, and for companies to make choices that reduce downstream carbon emissions.

Additionally, there are overlapping price signals, through different types of costs. For example, firms producing electricity with fossil fuels would face both higher capital costs through the Carbon Capital Levy and higher operating costs through ETS. The combination of both instruments would provide a greater incentive to switch away from fossil processes.

Policy instruments taxing capital or capital ownership

Many countries tax capital income, whereas only a handful of countries directly tax wealth. Therefore, we compare the Carbon Capital Levy with a capital income tax.

Table 9 – Differences between the Carbon Capital Levy and capital income tax

	Carbon Capital Levy	**Capital income tax**
Tax base	Capital or capital income	Capital income
Wealth threshold	Yes, 5$ million	Absent or low threshold (usually <$100,000)
Applies to which companies	Companies with >250 employees in certain fossil-heavy sectors	All companies
Applies to what part of company	Only fossil segment of company	Entire company

The capital income tax taxes all capital income. In this way, it has a large tax base and creates a steady revenue stream for governments, though revenue from e.g. capital gains taxes can fluctuate significantly from year to year. As capital income can only be generated when holding some capital, it reduces wealth inequality. It does not incentivise owners of capital to switch to assets with a smaller fossil footprint.

The Carbon Capital Levy, on the other hand, is more selective: it covers fewer taxpayers and fewer companies. It applies only to individuals with a capital of over $5 million, which especially reduces the wealth disparity between the 99% and the top 1%. It incentivises investors to reinvest in assets with a lower fossil share.

The combination of Carbon Capital Levy and capital income tax increases the capital tax rate for a select group of individuals and for a select group of companies. Otherwise, the policy instruments do not interact with one another. Although both measures tax capital, they can be implemented together. In this way, the government keeps a large, stable tax base, while placing the tax burden on the shoulders of those most able to bear it, while also incentivizing a shift within equity to lower-fossil companies.

4 Practical and legal feasibility

4.1 Practical feasibility

Overall assessment of practical feasibility

We distinguish two main steps for practical implementation of the Carbon Capital Levy:

1. Identifying what high-wealth individuals are liable and identify their business capital ownership at company-level:
   - data needed on private individuals' ownership of private and publicly listed companies and investment portfolios;
   - information needed on corporate structures to verify ultimate beneficial ownership and disregard intermediaries (e.g. holdings, trusts).
2. Identifying what companies are in scope and determine their fossil and non-fossil share of companies:
   - company-level data needed to verify the fossil and non-fossil share of activities (based on sector-specific definitions);
   - firm size indicators needed (e.g. ≥250 employees, turnover, assets) to apply scope limitations.

Our overall assessment is that the most challenging aspect of implementation is identifying capital ownership at the level of the ultimate owner. High-wealth individuals often hold assets through complex holding structures, with multiple intermediary entities between the operating company and the final beneficial owner. As a result, tracing ownership can be administratively complex and reflects a broader challenge that tax authorities already face in effectively taxing high-wealth individuals. Ultimate Beneficial Ownership (UBO) registers can partly address this issue, but such registers are not yet available in many countries. Moreover, effective implementation would require international information exchange and coordination between jurisdictions.

Identifying companies that fall within the scope of the levy and determining their fossil fuel-related share is probably less complicated. Existing sustainable finance taxonomies already provide important precedents for reporting which activities are fossil-fuel based and which are not. For example, the EU Taxonomy requires large companies and financial institutions to disclose the share of activities aligned with environmental sustainability

criteria. Similar taxonomy frameworks have also been introduced in jurisdictions including ASEAN, China, Brazil, Indonesia, Mongolia, Rwanda and South Africa (Sustainable Finance Taxonomy Mapper, 2026). This demonstrates that environmental activity-based reporting can be implemented in practice.

At the same time, important challenges remain. Many countries do not yet require corporate environmental reporting, and existing taxonomies differ in scope and methodology. Since a Carbon Capital Levy would require a relatively consistent approach across jurisdictions, near-term implementation would likely be difficult. Nevertheless, ongoing developments in sustainability reporting and international tax transparency suggest that several of the building blocks needed for such a levy are being developed.

Design options to improve feasibility

Shifting the burden of proof to high-wealth individuals, companies and asset managers

To increase practical feasibility, the burden of proof can largely be placed on companies and high-wealth individuals. This means that companies report the fossil and non-fossil share of their activities based on sector-specific guidelines, while high-wealth individuals report their business ownership and, for each asset, the corresponding fossil share subject to taxation. Tax authorities would not calculate these shares themselves but would verify them through audits and checks. This approach is consistent with existing tax practices. For example, under value-added tax (VAT) systems, firms are required to self-report taxable transactions, while tax authorities verify compliance through audits and risk-based controls. Tax authorities therefore rely on taxpayer reporting combined with ex post verification.

Investors may not invest directly in individual companies but through investment funds and ETFs, which consist of diversified portfolios of shares and bonds. This makes it more challenging to determine the fossil share of these investments. In such cases, the burden of proof should lie with the financial instruments rather than with tax authorities or individual investors. Investment funds and ETFs should therefore report the fossil fuel share of their portfolios, for example as a weighted average of the fossil shares of the underlying companies. In practice, disclosure requirements for funds and ETFs already exist under EU frameworks such as the Sustainable Finance Disclosure Regulation (SFDR), where asset managers must report sustainability characteristics of their portfolios, including indicators such as exposure to companies active in the fossil fuel sector.

There are legal limits to the extent that burden of proof can be implemented across jurisdictions. A government cannot directly impose reporting obligations on companies located outside its jurisdiction, or companies that do not carry out significant activities within its jurisdiction. Requiring a company located in a country that does not implement the levy to report its fossil share, would conflict with principles of territorial sovereignty.

In practice, this limitation can be addressed by shifting the obligation to parties within the jurisdiction. Governments can impose requirements on domestic investors to report the fossil share of their investments. If they are unable to do so, default rules could apply, such as treating the investment as fully fossil-fuel dependent. This approach is consistent with existing tax practices. For example, Controlled Foreign Company (CFC) rules also require taxpayers to report and include certain income from foreign subsidiaries, even if those entities are located abroad.

Address data gaps by applying a conservative default rule

A practical solution to address data gaps is to apply a conservative default rule, whereby business capital is treated as 100% fossil fuel dependent if no (reliable) information is provided. This creates an incentive for individuals and companies to disclose transparent, and sufficiently detailed information on the fossil and non-fossil composition of their business activities.

The main challenge lies in verifying the accuracy of the reported data. For private companies, tax authorities often lack access to detailed, audited, and standardised information, making it difficult to validate disclosures. This challenge is even greater for foreign companies, where tax authorities may have limited legal access to underlying data and must rely on disclosures that fall outside their own jurisdiction and audit standards.

The complexity of verifying the fossil fuel share of investments varies by type of ownership structure, primarily due to differences in transparency, number of legal layers, and the ability of tax authorities to verify data. Direct ownership of publicly listed companies is relatively straightforward, as data is widely available and audited. Complexity increases for private companies and holdings, where data is less transparent and requires looking through ownership structures. For ETFs and funds, the large number of underlying firms and changing composition make calculations more demanding, although reporting frameworks provide some structure. The highest complexity arises in trusts and private equity structures, where multiple legal layers and limited public disclosure make it difficult for tax authorities to obtain and verify reliable information.

Table 10 – Practical complexity per type of investment

Type of investment	Practical complexity	Description
Direct public business ownership	Low	No intermediate layers; data publicly available; verification straightforward
Direct private business ownership	Medium	No intermediate layers, limited public data; verification depends on company reporting
Holdings	High	Requires looking through intermediate layers; verification depends on availability of company data and holding structures

Type of investment	Practical complexity	Description
ETFs/funds	High	Large number of underlying firms; composition changes over time; verification depends on fund-level reporting
Trusts/private equity	High	Multiple legal layers; limited or no public data; verification is difficult due to fragmented information

It should be noted that the intentional misreporting of the fossil fuel share of business activities or the ownership of taxable capital by high-wealth individuals would constitute tax evasion and therefore be illegal. Effective enforcement mechanisms, combined with financial penalties and the risk of legal sanctions, should provide a strong deterrent against the provision of false or misleading information.

4.2 Legal feasibility

A full legal assessment is beyond the scope of this study. However, it is useful to assess the proposed levy against a number of commonly used legal criteria. In general, tax measures are evaluated based on whether they (1) pursue a legitimate objective, (2) are suitable to achieve that objective, and (3) are proportionate, meaning that the measure is not excessive and that no less restrictive alternatives are available. In addition, considerations such as equal treatment, legal certainty, and avoidance of unjustified double taxation are relevant in assessing legal robustness.

Criterion 1: The levy pursues a legitimate objective

The proposed levy aims to address two objectives: (1) reducing fossil fuel dependency in investment decisions and (2) addressing wealth concentration linked to fossil fuel-related economic activities. Both objectives can be considered legitimate from a public policy perspective. Climate mitigation is widely recognised as a legitimate policy goal in international law, and taxation is a commonly used instrument to influence economic behaviour and raise public revenue. Similarly, addressing wealth inequality through taxation falls within the accepted scope of fiscal policy.

Criterion 2: The levy is suitable to achieve the objective

The suitability of the levy concerns whether the measure is capable of contributing to its stated objectives. In this case, the objective is to influence investment behaviour and reduce fossil fuel dependency.

By taxing the fossil fuel dependent share of business ownership, the measure directly affects capital allocation decisions. This creates a financial incentive for investors to shift towards non-fossil activities. In that sense, the design of the levy is aligned with its objective and can be considered suitable in principle.

The suitability of the measure is further supported by its sectoral scope. The levy focuses on sectors that together account for approximately 77% of global CO_2 emissions, meaning that it captures a large share of fossil-related economic activity. This increases the likelihood that the measure can meaningfully contribute to its objective.

At the same time, the suitability of the measure depends on its practical feasibility. If certain investments, such as those in private equity, cannot be effectively included, actual coverage may be lower than intended. This can reduce effectiveness and may weaken the legal argument that the levy is suitable to achieve its objective.

Criterion 3: The measure is proportionate

Proportionality requires that the levy does not impose an excessive burden relative to its objectives and that no less restrictive alternatives are available to achieve the same objective.

Several elements support the proportionality of the proposed levy. First, the levy is narrowly targeted: it applies only to high-wealth individuals and only to the fossil fuel dependent share of business ownership. This limits the scope of the measure and ensures that it is focused on activities most closely linked to the policy objective, rather than applying broadly across all forms of wealth or economic activity.

Second, the use of thresholds and sectoral limitations further reduces the burden by excluding smaller taxpayers and focusing on sectors where fossil dependency is most clearly defined and most material. This contributes to a more targeted and therefore less restrictive design.

At the same time, there are potential proportionality concerns. The levy may impose a significant burden on certain types of investments, particularly if fossil-related activities are already subject to other regulatory measures such as carbon pricing. This raises the question of whether the same objective could be achieved through less restrictive means, for example by strengthening existing instruments. However, these instruments primarily apply to emissions or production, whereas the proposed Carbon Capital Levy applies to capital ownership and also addresses downstream emissions. This provides a justification that the measure addresses a different dimension of the problem and is therefore not simply duplicative.

Separate consideration: equal treatment across sectors

A separate legal consideration is whether it is justified to apply the levy to specific sectors, such as oil and gas, electricity and heat generation, automotive, construction, aviation, and shipping, while excluding others.

The proposal justifies this selection based on two criteria: (1) the contribution of these sectors to global greenhouse gas emissions and (2) the ability to clearly distinguish between fossil and non-fossil activities. This provides an objective basis for differentiation.

However, other sectors with significant emissions, such as heavy industry or manufacturing, are excluded. This may raise questions regarding equal treatment if comparable activities are treated differently. The legal robustness therefore depends on demonstrating that the sectoral distinction is based on objective and consistent criteria, and that exclusions are due to practical limitations (such as measurability) rather than arbitrary choices.

Separate consideration: double taxation

The levy applies to multiple sectors linked through fossil fuel use, such as oil and gas (extraction) and downstream sectors like electricity, aviation, and shipping (use of fossil fuels). As a result, the same underlying fossil fuel may be reflected in the tax base at different stages. This does not constitute double taxation in a strict legal sense, as the levy is not levied on the same taxable event or base, but on different forms of business ownership in different sectors. Each taxable element reflects a separate economic activity and a separate investment decision. For example, an investor holding shares in both an oil and gas company and an airline is taxed on two distinct sources of fossil dependency.

5 Conclusions and recommendations

Conclusions

While carbon pricing instruments should in principle reduce the profitability of fossil fuel-related activities, fossil investments often remain attractive in practice. Companies are frequently able to pass through (part of) higher carbon costs to consumers, particularly in sectors with relatively inelastic demand for fossil fuels. In periods of high energy prices, fossil fuel producers may also generate windfall profits that offset part of these costs.[13] This implies that costs are borne mostly by consumers and households through higher energy and fuel prices, while investors and owners of fossil fuel-dependent capital benefit from high returns. This may contribute to lock-in of emissions, as companies continue to invest in products and infrastructure that rely on fossil fuel use over their lifetime.

The Carbon Capital Levy directly addresses this gap by applying the levy to individuals holding fossil fuel-related investments, thereby reducing the returns on these assets. The levy therefore shifts part of the policy burden towards investors and owners of capital, who influence corporate strategies, investment decisions, and the long-term direction of business activities. By lowering the profitability of fossil-related assets, the levy creates an additional incentive to redirect capital towards non-fossil alternatives.

The levy applies to the fossil fuel-dependent share of business activities, including the sale of products that enable downstream fossil fuel use. Rather than targeting companies' operational emissions, it targets their broader role in sustaining fossil fuel consumption. In this way, the levy complements existing policies such as emissions trading systems.

We estimate that a Carbon Capital Levy could raise $109 billion globally and $47 billion if implemented in a coalition of the willing consisting of 52 countries. This excludes any behavioural effects in response to the levy. The levy serves a dual purpose: It generates public revenues while steering capital allocation away from fossil fuel-related investments. These two objectives are partly in tension with one another. If the levy is effective in reducing fossil fuel investments or incentivising firms to phase out fossil activities,

[13] Windfall profits from fossil fuels could also be addressed through targeted policies, such as the Rich Polluter Profit Tax previously proposed and analysed by Oxfam.

revenues will decline over time. If the levy does not steer capital allocation away from fossil fuel-related investments, it generates stable public revenues over time.

At the same time, a Carbon Capital Levy may contribute to more resilient economies by reducing exposure to fossil fuel price volatility, which has been pronounced in recent years due to geopolitical tensions. Greater economic resilience to such shocks do support more stable levy revenues in general.

We estimate that, given an average return of 4.7% on global fossil fuel assets in between 2010 and 2020, profitability of fossil fuel-related capital could decline by more than half under a levy rate of 2.5%, suggesting that the instrument could effectively redirect business investment away from fossil fuel-based companies. However, it should be noted that the proposed tax design excludes smaller investors below the capital threshold and institutional investors such as pension funds and insurance companies, meaning that a relevant share of fossil fuel-related capital would remain outside the scope of the levy.

An important result is that the levy affects only a relatively small share of total private wealth. On average, the Carbon Capital Levy covers around 5% of total wealth holdings, corresponding to an effective wealth tax burden of roughly 0.12%. Because the overall burden remains modest, the levy may face less resistance from investors and may lower incentives for avoidance strategies such as relocation or tax evasion. However, the limited scope also means that the instrument is unlikely to have a major effect on overall wealth inequality. A stronger redistributive effect would require either a higher levy rate or a broader sectoral coverage, although this could also trigger incentives for capital flight and negative economic side effects such as reduced investments into the economy.

A challenge lies in that investors in countries implementing the levy may shift towards non-fossil investments, investors from non-participating jurisdictions may exploit arbitrage opportunities and fill this gap by investing in fossil-related assets. This risk is difficult to prevent in practice, although it mainly concerns publicly traded capital which can be bought and sold relatively easily, and less so to capital held in private companies, which is generally more illiquid.

The levy faces practical barriers that need to be overcome. The main implementation challenge is identifying business capital at the level of the ultimate owner, as high-wealth individuals often hold assets through complex holding structures. UBO registers could partly address this issue, but such systems are not yet widely implemented. Determining the fossil fuel-related share of companies appears more feasible, as existing sustainable finance taxonomies already provide precedents for activity-based environmental reporting. Near-term implementation is difficult, as many countries still lack corporate environmental reporting requirements and existing taxonomies differ in definitions and methodology.

Recommendations

- This study is exploratory in nature and provides a first high-level assessment of possible design options, potential effects and implementation challenges. More detailed analysis is needed to quantify the effectiveness of the levy in reducing fossil fuel-related investments and to further examine its practical and legal feasibility.
- **Introduce a phase-in period to give investors and businesses time to adapt.** As a guiding principle for green taxation, taxpayers should be given possibilities to reduce or avoid the levy through behavioural change. This increases acceptability of the levy and could reduce tax evasion and/or avoidance. A possible phase-in period could be to start with a levy rate of 0.5% in year 1 and gradually increase to 2.5% over a 5-year period.
- **Consider introducing a longer phase-in period, as discussed in the previous bullet, for business assets that are less easily substituted with non-fossil alternatives.** Tradable financial assets, such as listed equities, are relatively liquid and can be reallocated more easily from fossil to non-fossil investments, justifying a shorter transition period. In contrast, ownership in private companies is significantly less liquid, making rapid reallocation more difficult. For these assets, a longer phase-in period could be applied to allow businesses and investors sufficient time to adjust.
- **Strengthen international transparency on beneficial ownership to improve the enforceability of the levy.** A key implementation challenge is that high-wealth individuals often hold business assets through complex international holding structures involving intermediary entities. Further development of UBO registers, combined with international exchange of ownership information between tax authorities, would help improve the identification of ultimate owners.
- **Ensure international coordination of the levy to improve its effectiveness and support harmonised implementation.** For example, international cooperation helps in developing common rules on the treatment of fossil and non-fossil business activities, building on sustainable finance taxonomies that already exist in multiple countries and regions. The OECD/G20 agreement on a global minimum tax rate for multinational enterprises demonstrates that countries can reach agreement on complex cross-border tax measures through a ‘coalition of the willing’ approach. Similar international cooperation, potentially linked to ongoing discussions on a UN Tax Convention, could provide a foundation for developing a common methodology and coordinated implementation of a Carbon Capital Levy.

A Methodology note

A.1 Analysis of returns on investments in renewable energy and fossil fuel

Research question 2 states that the levy rate should be set at a level that generates significant revenue, makes investments in non-fossil business activities more attractive, and avoids negative impacts on the economy. To estimate the levy rate required to stimulate such investments, we examined the difference in returns between fossil and non-fossil investments. The analysis is described below. In the end, this approach proved unsuitable as a basis for determining the levy rate.

One approach is to compare investments in fossil energy with investments in renewable energy, as these sectors clearly represent fossil versus non-fossil activities and involve large-scale investments. The IEA (2021) shows that over the period 2010 to 2020, renewable energy investments yielded higher returns than fossil energy investments, with global annual returns of approximately 18% for renewables and 4.7% for fossil energy. The difference was largest in developed economies, while in emerging and developing economies it was smaller and even favoured fossil investments in the period 2015 to 2020. The IEA has not published more recent comparable data, but higher fuel prices following the Russia-Ukraine war likely increased returns in fossil energy in recent years.

Another approach is to compare fossil energy indices with non-fossil indices. For this, we consider the MSCI World Index and the MSCI World ex Fossil Fuels Index, which excludes companies owning oil, gas and coal reserves while maintaining broad market exposure. Over the period from November 2010 to February 2026, the MSCI World ex Fossil Fuels Index outperformed the MSCI World Index by around 0.5 percentage points per year on average (MSCI, 2026). A comparison using S&P indices shows a different pattern. Both indices are volatile: the S&P Global Clean Energy Index shows an annualised return of around 10% over ten years but around −5% over five years (S&P, 2026a), while the S&P Oil and Gas Index shows about 7% over ten years and around 17% over five years (S&P, 2026b). This supports the hypothesis that returns in oil and gas have increased in recent years, particularly following the Russia-Ukraine war. Comparing indices has the advantage that it is based on actual market data and realised returns,

and aligns with how investors allocate capital. However, it also has important limitations. It measures shareholder returns rather than returns on underlying investment projects, excludes private and many state-owned companies, and is sensitive to the chosen time period and market dynamics. Moreover, fossil and non-fossil investments do not fully compete for the same capital, which limits the use of these comparisons for determining an appropriate levy rate.

A.2 Levy revenue calculation

The levy can be characterised in that it applies to:

- the capital of high-net-worth individuals;
- sectors with a clearly defined fossil segment;
- the fossil segment of these sectors;
- companies above a certain size.

To calculate the levy revenue, we first determined the amount of capital that lies above the high net-worth threshold (1). Then, we adjusted this number for the share of companies falling in the sectors with a fossil segment (2). Subsequently, we corrected for the average fossil segment of these companies (3). Then, we considered the share of companies which lie above the company size threshold to obtain the tax base (4). Finally, we apply the levy rate to obtain the levy revenue.

The equation used for deriving the levy revenue per wealth bracket per country is as follows:

$$\begin{aligned} Tax\ revenue = {} & Capital\ above\ threshold * Share\ of\ company\ value\ in\ chosen\ sectors \\ & * Share\ of\ fossil\ segment * Share\ of\ companies \\ & > 250\ employees * Tax\ rate \end{aligned}$$

For the final four terms in the calculation, the following values and assumptions have been used, further elaborated on below:

Table 11 – Values used for final four terms of calculation

Part of calculation	Value used
Share of company value within proposed sectors	13%
Share of fossil segment	86%
Share of companies with more than 250 employees	83%
Levy rate	2.5%

To determine the levy revenue per country income group and region, countries were classified according to World Bank data (World Bank, 2026).

A.2.1 Calculating the capital above net-worth threshold

Calculating the capital related to business ownership above the threshold involves several steps.

First, we collected data on the net personal wealth of individuals from the World Inequality Database (World Inequality Lab, ongoing). We used 2024 data from all available countries. We then selected the average wealth for all available quantiles.[14] We ended up with the average net personal wealth per quantile per country.

We then adjusted the average wealth for the share of wealth which is held in capital (private and public business ownership, including investment portfolios). This capital share of wealth differs for different levels of wealth. We used data from Sweden and the USA to determine the capital share of wealth for the wealth brackets below (Bastani & Waldenström, 2023; US Federal Reserve, 2016):

Table 12 – Capital share of wealth for different wealth brackets

Wealth bracket	$1 to $7 million	$7 to $20 million	$20 to $100 million	$100 million to $1 billion	$1 billion or more
Share in capital	25%	45%	65%	85%	90%

This gave the average capital per wealth quantile per country. In total, around 52% of the wealth above the $5 million threshold was held in capital.

We also collected 2024 population data per country from the United Nations (UN, ongoing). We removed countries from the dataset for which either wealth data or population data was not available. The dataset used comprised 99,96% of the world's population and 99,88% of the world's net personal wealth.

We then calculated the total capital falling above the net-worth threshold per country as follows:

- For each wealth quantile, compare the average capital to the net-worth threshold.
  - If average capital is lower, do nothing.
  - If average capital is higher:
    - determine the number of individuals falling in the quantile. This is done by multiplying the size of the quantile (e.g. 0.1% for the bracket 99.4-99.5) by the country's population.
    - Multiply the average capital by the number of individuals falling in the quantile to obtain the total capital falling above the net-worth threshold for this quantile.

[14] This included 37 different net personal wealth quantiles (90-91, 91-92, ..., 98-99, 99-99.1, …, 99.8-99.9, 99.9-99.91, …,99.98-99.99, 99.99-99.991, …, 99.998-99.999, 99.999-100). Local currencies were converted to dollars using the market exchange rate. Household wealth was allocated to all adults in the household evenly (equal-split).

- Sum over all wealth quantiles to obtain the total capital falling above the net-worth threshold.

This gives a global personal capital above a $5 million threshold of $48 trillion. For the coalition of the willing of 52 countries, this figure is $20 trillion.

A.2.2 Determining the other elements of the calculation

We determine the share of companies in the proposed sectors, the share of their fossil segment and the share of companies with more than 250 employees. We calculate this per sector, to ensure that the shares we end up with represent a weighted average.

Table 13 – Determining the share of companies in proposed sectors, the share of their fossil segment and the share of companies with more than 250 employees

Sector	Market capitalisation (trillion $)	Fossil fuel segment	Fossil share	Fossil market capitalisation (trillion $)	Share of turnover from companies with >250 employees	Fossil market capitalisation of companies with >250 employees (trillion $)
Electricity generation	4.57	Electricity generation from fossil fuels	64%	2.92	66%	1.93
Oil and gas	8.36	Fossil fuel extraction and production	99.9%	8.35	94%	7.78
Construction	1.05	Construction of buildings with fossil heating	85%	0.90	21%	0.19
Automotive	3.09	Production of vehicles with internal combustion engine	75%	2.32	94%	2.18
Aviation	0.41	Use of fossil fuels	99.4%	0.41	80%	0.33
Shipping	0.38	Use of fossil fuels	99.7%	0.38	41%	0.15
Sum	17.85			15.27		12.62
All sectors	135.90		Total market cap	17.85	Total fossil market cap	15.27
Share	**13%**			**86%**		**83%**

Market share of proposed sectors with a fossil segment

To determine the size of the proposed sectors within the capital of high-wealth individuals, we used data on the market capitalisation of these sectors. This assumes that high-wealth individuals invest into similar sectors as the overall distribution of investments. This is reasonable, since they make up a large part of investments. A limitation of using market capitalisation as a proxy for size of investments is that it excludes private companies.

We used data from companiesmarketcap.com (2026). The total market capitalisation on March 18th, 2026, was $135.90 trillion, of which $17.85 trillion belonged to the proposed sectors, giving a share of 13%.

Share of fossil segment within these sectors

For every sector, the fossil segment is determined differently.

- For electricity generation, it is the share of electricity produced with fossil fuels. According to IEA (2025), the share of renewable energy generation is 36%. This makes the fossil share 64%.
- For oil and gas, it is the share of fossil fuel extraction and production. According to Llavero-Pasquina & Bontempi (2025), the largest 250 oil and gas companies generate around 0.1% of their primary energy from renewable sources, making the fossil share 99.9%
- For construction, it is the share of fossil heating installed in constructed buildings. As a proxy for the non-fossil part, we take the share of renewables used in heating buildings. This share was 15% in 2023 (IEA, 2023), making the fossil share 85%.
- For the automotive sector, it is the share of internal combustion engines produced. We use cars as proxy for all vehicles. Electric car sales made up 25% of global new car sales (Lewis, 2025), making the fossil share 75%.
- For aviation, it is the share of fossil fuels used. Sustainable aviation fuel use was projected to account for 0.6% of total fuel use in 2025 (IATA, 2025), making the fossil share 99.4%.
- For shipping, it is also the share of fossil fuel used. Hydrogen is only starting to be used as fuel. Biofuels accounted for 0.3% of total energy use in 2023 (DNV, 2025), making the fossil share 99.7%.

Multiplying the fossil share of sectors by their market capitalisation and summing over the sectors gives a figure of $15.27 trillion belonging to the fossil segment, out of a total market capitalisation of $17.85. This gives a fossil share of 86%.

Company size threshold

We use OECD (2026) to collect business statistics by size class and economic activity. These data contain turnover figures by sector, differentiated between firms with fewer than 250 employees and those with at least 250 employees. Firms with fewer than 250 employees fall outside the scope of the levy.

The data are only available for a set of European countries. The percentages might differ if non-European countries were also included in the dataset; however, such data are not publicly available to our knowledge.

Multiplying share of turnover from companies with more than 250 employees by the fossil part of their market capitalisation and summing over the sectors gives a figure of $12.62 trillion, out of a total fossil market capitalisation of $15.27. This gives a share of company turnover falling above the size threshold of 83%.

B Sensitivity analysis

We performed a sensitivity analysis of levy revenues to different thresholds of individual capital. In addition to the figure of $5 million used in the main scenario, we also considered thresholds of $10 million, $50 million and $100 million. Additionally, we calculated the levy revenues for different levy rates. Next to the 2.5% used in the main scenario, we considered levy rates of 1 and 5%. The results are presented below.

Table 14 – Levy revenues for a capital threshold of $5 million

Threshold $5 million	Global implementation – levy revenue	Coalition of the willing – levy revenue
Levy rate 1%	$44 billion	$19 billion
Levy rate 2.5%	$109 billion	$47 billion
Levy rate 5%	$217 billion	$94 billion

Table 15 – Levy revenues for a capital threshold of $10 million

Threshold $10 million	Global implementation – levy revenue	Coalition of the willing – levy revenue
Levy rate 1%	$39 billion	$17 billion
Levy rate 2.5%	$98 billion	$43 billion
Levy rate 5%	$195 billion	$86 billion

Table 16 – Levy revenues for a capital threshold of $50 million

Threshold $50 million	Global implementation – levy revenue	Coalition of the willing – levy revenue
Levy rate 1%	$28 billion	$13 billion
Levy rate 2.5%	$71 billion	$33 billion
Levy rate 5%	$141 billion	$66 billion

Table 17 – Levy revenues for a capital threshold of $100 million

Threshold $100 million	Global implementation – levy revenue	Coalition of the willing – levy revenue
Levy rate 1%	$25 billion	$12 billion
Levy rate 2.5%	$63 billion	$30 billion
Levy rate 5%	$126 billion	$60 billion

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