GREEN TAXES AS A MEANS OF FINANCING
THE EU BUDGET:
POLICY OPTIONS

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Study commissioned by MEP Helga Trüpel
The Greens/European Free Alliance

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Executive Summary

Most observers agree that the EU budget in its current form, is not working as it should. This applies to both the way the budget is funded, currently through a complex calculation of member state contributions, as well as the process for agreeing how the budget should be spent, known as the Multi-Annual Financial Framework (MFF). This report looks at the former element: how the EU budget is financed.

Over the years the EU budget has become too complex and has diverted from its original intended design. This development has not only hampered democratic accountability, but also reduced the budget autonomy of the Union. Today, 86% of the EU’s total revenues stem from de facto national contributions. Truly genuine ‘own resources’, i.e. funding streams under the EU’s direct control, decreased from over 65% in 1976 to just 12.9% in 2016. This shift actually goes against the founding treaties of the Union which envisioned a directly controlled funding model based on ‘own resources’.

The political debate over the EU budget has become increasingly embroiled, in recent years, in tit-for-tat fights over who pays what, and who gets their fair share. The debate has reinforced the perception among citizens that the EU is a costly burden rather than a tool for positive change and the common good.

**Green taxes: tools to transform the EU budget and help Europe reach its environmental goals**

The EU needs to secure a frontrunner position in the fight against climate change – a green financing model for the EU itself could play an important role in achieving that.

If the main revenue streams for the EUR 143 billion EU budget were shifted to green tax-based instruments, there is a huge potential to direct investments towards more sustainable and environmentally-friendly market behaviour.

Green tax-based instruments are the smartest candidates for new own resources. They could greatly enhance European advances in environmental tax reform and also help to overcome the deficiencies apparent in the current system of financing the EU budget. They are a win-win for the environment and for the future financing of the European Union’s budget.

In addition, democratic accountability could be enhanced since the mechanism of revenue collection through existing taxation is already well established in the member states and therefore more easily understood by EU citizens.

In order to prevent an unfair or unequal burden on different member states due to a large diversity of current tax levels and tax regimes, a decision to move towards environmental taxes would also favour advances towards tax harmonisation across Europe. This could ultimately reduce tax competition and lead towards a better allocation of resources and more effective taxing of environmental “bads”. Thus, also the polluter-pays-principle would be further strengthened.
Green own resource candidates, a preliminary assessment

With the preparation of budget reform proposals undertaken by the High-level group on own resources (HLGOR) chaired by Mario Monti, as well as in light of the implementation of the Paris Agreement and the adoption of the UN Sustainable Development Goals (SDGs) it is time to put forward alternative, more democratic, transparent and more ambitious own resource candidates for a more transparent and better financed future EU budget.

This report examines a range of potential environmental market-based instruments and presents four concrete policy options as candidates for future green own resources.

Three of these policy options are based on environmental taxes: road fuel taxes, carbon taxes and energy taxes. A fourth non-ecological option discusses the case of using fines from the Court of Justice of the European Union (CJEU) as a potential revenue stream.

A preliminary assessment regarding their economic, environmental, social and political suitability reveals their respective advantages and potential challenges as candidates for future EU own resources, as outlined in the following table.

Table 1: Overview of findings from preliminary assessment

<table>
<thead>
<tr>
<th>Economic Dimension</th>
<th>Road Fuel Tax</th>
<th>CO₂ Tax</th>
<th>Energy Tax</th>
<th>CJEU Fines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficiency</td>
<td>★ ★ ★ ★ ☆</td>
<td>★ ★ ★ ★ ★</td>
<td>★ ★ ★ ★ ★</td>
<td>★ ★ ★ ☆</td>
</tr>
<tr>
<td>Stability</td>
<td>★ ★ ★ ★ ☆</td>
<td>★ ★ ★ ★ ☆</td>
<td>★ ★ ★ ★ ★</td>
<td>★ ★ ★ ☆</td>
</tr>
<tr>
<td>Low operating costs</td>
<td>★ ★ ★ ★ ☆</td>
<td>★ ★ ★ ★ ☆</td>
<td>★ ★ ★ ★ ★</td>
<td>★ ★ ★ ★ ★</td>
</tr>
<tr>
<td>Environmental Dimension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficient allocation of resources</td>
<td>★ ★ ★ ★ ☆</td>
<td>★ ★ ★ ★ ★</td>
<td>★ ★ ★ ★ ★</td>
<td>★ ★ ★ ★ ★</td>
</tr>
<tr>
<td>Social Dimension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horizontal equity</td>
<td>★ ★ ★ ★ ☆</td>
<td>★ ★ ★ ★ ★</td>
<td>★ ★ ★ ★ ★</td>
<td>★ ★ ★ ★ ★</td>
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<tr>
<td>Vertical equity</td>
<td>★ ★ ★ ★ ★</td>
<td>★ ★ ★ ★ ★</td>
<td>★ ★ ★ ★ ★</td>
<td>★ ★ ★ ★ ★</td>
</tr>
<tr>
<td>Preliminary assessment</td>
<td>★ ★ ★ ★ ☆</td>
<td>★ ★ ★ ★ ★</td>
<td>★ ★ ★ ★ ★</td>
<td>★ ★ ★ ★ ★</td>
</tr>
</tbody>
</table>

1 Road fuel taxes

Own resources based on road fuel taxes could effectively tackle rising greenhouse gas emissions in the transport sector – the only sector where such emissions are still increasing – as well as helping to reduce air pollution and addressing tax distortions caused by ‘fuel tax tourism’ in the EU single market.

Performing well on economic criteria, road fuel taxes would also provide a stable and sufficient source of revenue. They also outperform general energy taxes (see below) in terms of impacts on social equity. Though they may not generate the same revenue as energy taxes, they could cover the entire EU budget when added together. Depending on the design of the instrument, they could also address the persisting petrol and diesel price gap – effectively a Europe-wide subsidy for air pollution. ‘Dieselgate’ and rising public concern over air pollution have created some political momentum.
2 Carbon taxes

In terms of environmental impact, carbon taxes deliver the most promising value added as a source of revenue for the EU budget. They would directly address the necessary reductions in the 55% of GHG emissions not covered under the EU ETS. Evidence from countries such as Sweden that have introduced carbon taxes shows that the measure is not incompatible with maintaining a globally competitive economy. Furthermore, in light of the Paris Agreement and the UN Sustainable Development Goals adopted in September 2015, an ambitious CO₂ tax would also set an important signal that the EU takes its global environmental responsibilities seriously.

3 Energy taxation

Broad energy taxation promises the largest potential revenue stream and is therefore the leading candidate in terms of economic sufficiency and stability, but its impacts on social equity are more difficult to estimate. While evidence suggests that energy taxes are still less regressive than other forms of taxation including VAT, the other candidates included in the preliminary assessment do perform better on this dimension. One advantage of energy taxation over carbon taxation when considering potential EU own resources candidates is however that every member state already has energy tax regimes in place and therefore this option might encounter less political opposition.

4 Fines imposed by the Court of Justice of the European Union

Using the fines imposed by the Court of Justice of the European Union as an own resources revenue stream for the EU budget might be less politically challenging than the other options assessed above. This choice would also end the existing paradoxical situation whereby these fines are currently used to offset member state contributions rather than as a revenue stream accessible to the EU institutions. Although they offer no direct ecological European value added, they are still closely linked to European and green efforts to address market failures and manipulations and to enhance economic fairness. In terms of sufficiency, they are by far the weakest among the four options scrutinised, but they could still constitute a share in a package of several green own resource options.

Next steps

The assessment presented in this study is far from exhaustive. The different options presented provide a general overview on what green own resources for the European Union could look like and which factors should play a key role in selecting potential candidates. A future study will look at these options in greater detail.
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**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CCCTB</td>
<td>Common consolidated corporate tax base</td>
</tr>
<tr>
<td>CO₂</td>
<td>Carbon dioxide</td>
</tr>
<tr>
<td>CJEU</td>
<td>Court of Justice of the European Union</td>
</tr>
<tr>
<td>DG</td>
<td>Directorate General</td>
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<tr>
<td>EC</td>
<td>European Commission</td>
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<tr>
<td>ECSC</td>
<td>European Coal and Steel Community</td>
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<tr>
<td>EEA</td>
<td>1) European Economic Area, 2) European Environmental Agency</td>
</tr>
<tr>
<td>EEC</td>
<td>European Economic Community</td>
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<tr>
<td>EESC</td>
<td>European Economic and Social Committee</td>
</tr>
<tr>
<td>EEX</td>
<td>European Energy Exchange</td>
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<tr>
<td>EFSS</td>
<td>European Financial Stability Facility</td>
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<tr>
<td>EP</td>
<td>European Parliament</td>
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<tr>
<td>ESA</td>
<td>European System of National and Regional Account</td>
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<tr>
<td>ESD</td>
<td>Effort Sharing Decision</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>EUA</td>
<td>EU emission allowances</td>
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<tr>
<td>EUCIT</td>
<td>European Union corporate income tax</td>
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<tr>
<td>EU ETS</td>
<td>European Union Emission Trading Scheme</td>
</tr>
<tr>
<td>EUR</td>
<td>Euro (European Monetary Unit)</td>
</tr>
<tr>
<td>FAT</td>
<td>Financial activities tax</td>
</tr>
<tr>
<td>FTT</td>
<td>Financial transaction tax</td>
</tr>
<tr>
<td>GBP</td>
<td>British Pound Sterling</td>
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<tr>
<td>GDP</td>
<td>Gross domestic product</td>
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<td>GJ</td>
<td>Gigajoules</td>
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<tr>
<td>GNI</td>
<td>Gross national income</td>
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<tr>
<td>GNP</td>
<td>Gross national product</td>
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<tr>
<td>GHG</td>
<td>Greenhouse gas</td>
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<tr>
<td>GNI</td>
<td>Gross national income</td>
</tr>
<tr>
<td>GNP</td>
<td>Gross national product</td>
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<tr>
<td>HLGOR</td>
<td>High-level group on own resources</td>
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<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>ICE</td>
<td>ICE Futures Europe</td>
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<tr>
<td>IFTA</td>
<td>International Fuel Tax Agreement</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>MBI</td>
<td>Market-based instrument</td>
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<tr>
<td>MEP</td>
<td>Member of the European Parliament</td>
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<tr>
<td>MFF</td>
<td>Multiannual financial framework</td>
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<tr>
<td>MS</td>
<td>EU member state</td>
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<tr>
<td>NOₓ</td>
<td>Nitrogen oxides</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
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<tr>
<td>ORD</td>
<td>Own-Resources Decision</td>
</tr>
<tr>
<td>RAL</td>
<td>‘Reste à liquider’ - outstanding commitments</td>
</tr>
<tr>
<td>SDGs</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>TEU</td>
<td>Treaty on European Union</td>
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<tr>
<td>TFEU</td>
<td>Treaty on the functioning of the European Union</td>
</tr>
<tr>
<td>TOR</td>
<td>Traditional own resources</td>
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</tbody>
</table>
UK: United Kingdom
UN: United Nations
UNFCCC: United Nations Framework Convention on Climate Change
US: United States of America
VAT: Value-added tax
Introduction: the case for using green taxes as ‘own resources’ to finance the EU budget

Most observers agree that the EU budget in its current form, is not working as it should. This applies to both the way the budget is funded, currently through a complex calculation of member state contributions, as well as the process for agreeing how the budget should be spent, known as the Multi-Annual Financial Framework (MFF). The scope of this paper is to look at the former element: how the EU budget is financed. It will argue that the current model could be reformed by transitioning away from member state contributions to a revenue stream linked to EU-wide ecological taxes and charges. In short direct funding of the EU budget, known as ‘own resources’, should move on to a system of ‘ecological own resources’.

As well as simplifying the politics and economics of the EU budget, a system of ‘ecological own resources’ would help the EU achieve its commitments on the defining political challenge of our age: the need to meet the EU’s 2030 targets on renewables and energy efficiency as well as international commitments in the Paris Agreement and the Sustainable Development Goal. The EU needs to secure a frontrunner position in the fight against climate changes – a green financing model for the EU itself could play an important role in achieving that.

If enough political support for the proposed changes in the European budget is found, a future, reformed, EU budget could have enormous advantages vis-à-vis the status quo. Firstly, the share of member state contributions would be significantly reduced. This would lead to greater autonomy for the EU institutions over the composition of revenue and consequentially over its budget in general.

Secondly, on an institutional basis such advances would strengthen the role of the European Parliament in future budget negotiations. Currently, 86% of the entire budget is financed by de facto national contributions, implying a strong leverage to member states and the Council when appropriation ceilings and budget margins are negotiated. Third, a future budget, a large share of which is financed through revenue sources which exert a steering effect towards a greener economy, would be beneficial for the economy at large. It would do so by financially disincentivising economic activities which have harmful effects on the environment and incentivise behaviour that fosters a development towards a more sustainable economy.

In this light this report will build on a short overview of the current system of financing the EU budget (chapter 1), including a section on the existing deficiencies (chapter 2). In the second half of the report, we will take a closer look on concrete candidates for future own resources (chapter 3). After discussing past proposals for new own resources (chapters 3.1 and 3.2) the report will provide an overview on potential ecological future own resources (chapter 3.3) and will finish with suggestions on how such proposals could be analysed in more depth (chapter 3.4).

For a glossary on relevant terminology, please consult the annex of this paper.
1 The EU budget: too complex, and in need of reform

The European Union's budget is a key enabler for achieving common goals such as protecting the climate and the environment, creating more social equity and economic cohesion or developing a cross-border research community. While the competences of the European Union grew significantly, especially in light of the financial and banking crisis, the EU budget shrank. In 2016, its combined resources were EUR 143.5 billion which accounts for around one per cent of EU GDP or half of Germany's federal budget\(^1\).

Over the years the EU budget has become too complex and has diverted from its original intended design. This development has not only hampered democratic accountability, but also reduced the budget autonomy of the Union. Today, 86% of the EU's total revenue stem from de facto national contributions. Truly genuine ‘own resources’, i.e. funding streams under the EU’s direct control, decreased from over 65% in 1976 to merely 12,9% in 2016\(^2\). This shift actually goes against the founding treaties of the Union which envisioned a directly controlled funding model based on ‘own resources’.

Figure 1: Revenue and expenditure of the EU budget 2016

![Pie charts showing revenue and expenditure of the EU budget 2016.]

Note: Broken down according to category, in percentage share of total budget (EUR 143 billion).


This approach has arguably worsened the political debate over the EU budget, which has become increasingly embroiled, in recent years, in tit-for-tat fights over who pays what, and who gets their fair share. The debate has reinforced the perception among citizens that the EU is a costly burden rather than a tool for positive change and the common good.

\(^1\) European Commission (2016a). Myths and Facts about the EU budget. The EU budget is enormous. DG Budget website.
The European Parliament will play a vital role in addressing and reversing this worrisome development and has been the main driver for reform in the past. Not least, it was the European Parliament which made its approval of the last long term EU budget (the Multi Annual Financial Framework – MFF) conditional on the launch of a reform process of the own resource system that led to the establishment of a High-level group (HLGOR) chaired by Mario Monti in 2014.

Before we turn to the work of the HLGOR and previous proposals for new own resources, the following section gives a brief overview of the current system of financing the EU.

1.1 The evolution of the EU budget – in a nutshell

The existing system of financing the European Union has evolved over time and has witnessed the development of a complex structure characterised by the subsequent inclusion and increase of non-genuine own resources as well as an intricate system of national exceptions and rebates. The following section will briefly outline the current system.

The European Coal and Steel Community (ECSC), founded in 1951 as a predecessor to the EU, had a genuine system in place for generating its own revenue. The proceeds came from levies on the production of coal and steel in accordance with Article 49 of the Treaty establishing the European Coal and Steel Community. The article empowered the High Authority to procure the necessary funds. The European Communities, founded in 1957, were initially financed purely through national contributions. The Treaties of Rome did not foresee the establishment of a system of own resources until the creation of a common tariff system would allow the generation of genuine revenues as a basis for proper own resources.

In 1970 a system of own resources was introduced first comprising two resources: the so-called traditional own resources, revenues generated by customs duties and agricultural levies and a second revenue element derived from a statistical value-added tax (VAT) base. However, both resources proved to be insufficient mostly because of two parallel developments. First, due to advances in international trade liberalisation, the share of traditional own resources peaked in the mid-1970s and has continued to decrease over time since then. Second, the Union’s competences extended to new policies and increased the need for additional revenue sources. Thus, a third source of own resource based on a percentage amount – referred to as call rate – applied to the gross national product (GNP) of each member state, later the gross national income (GNI) was introduced in 1988. As the share of the first two resources continued to shrink, the GNI-based resource became the main revenue source for the EU budget.

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1.2 The legal framework of the EU budget

The EU’s budgetary system is embedded in a distinct legal framework governed by three types of legal instruments:

1. The financial provisions of EU primary law as enshrined in the Treaties
2. Secondary legislation
3. Interinstitutional agreements

The latter provide conclusions on budgetary discipline, the annual budgetary procedure, interinstitutional cooperation on budgetary matters as well as measures on ensuring sound financial management and will not be covered in this report.\(^5\)

1.2.1 Financial provisions of EU primary law

The Treaty on the Functioning of the European Union (TFEU) contains the main provisions with regards to the European Union’s public finance. Title II on Financial Provisions of Part Six covers the Articles 310 to 325 and lays down the main rules concerning the EU’s general budget, budgetary principles, its own resource system, the multiannual financial framework, the annual budget, implementation and discharge and combatting fraud. Article 310 establishes the six general principles of the Union’s financing system which are unity, universality, equilibrium, annuality, specification and sound financial management.

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\(^5\) More information on the Interinstitutional Agreement on Budgetary Discipline and Sound Financial Management (IIA) can be found on the European Commission DG BUDG website (European Commission, 2015b).
Figure 3: Overview of the legal framework governing the budgetary system of the European Union (own illustration)

**THE BUDGETARY SYSTEM OF THE EUROPEAN UNION**

**ANNUAL BUDGET**
- TFEU Art. 314-315: Budgetary Procedure
- TFEU Art. 317-319: Implementation and Discharge
- TFEU Art. 322: On the Financial Regulation

**OWN RESOURCES**
- TFEU Art. 311: On the Own-Resources Decision (ORD)
- Own-Resources Decision (ORD)
  - Council Decision No 2014/335
  - Defines and establishes categories of OOs and methods of their calculation
  - Loss down ceilings for payments and commitment
  - Principles of current correction mechanisms

**MULTIYEAR FINANCIAL FRAMEWORK**
- TFEU Art. 312: Multiannual Financial Framework
- Multiannual Financial Framework

**CURRENT REVENUE COMPONENTS**
(percentage for 2016 budget)

- **OWN RESOURCES**
  - Other revenue + surplus (1.1%)
  - Traditional own resources (12.9%)
  - VAT-based own resources (13.1%)
  - GNI-based own resources (72.9%)

**EU Primary Law**
- Ordinary Procedure
- Adoption requires EP consent
- Delegated Regulation

**EU Secondary Law**
- EP is consulted

GREEN BUDGET EUROPE (GBE) AISBL
Article 311 stipulates that “[w]ithout prejudice to other revenue, the budget shall be financed wholly from own resources”\(^6\). It sets out the procedures to adopt the Own-Resource Decision (ORD) which can define new own resources and abolish old ones. It also covers the procedure to adopt implementing measures based on the ORD.

The adoption of an ORD is subject to a special legislative procedure under secondary law. First, it requires unanimity in the Council while the European Parliament plays only a consultative role. Second, article 311 states that the decision needs to await approval by member states “according to their constitutional requirements”. In many cases this entails the involvement of national parliaments and almost gives the ORD the legal status of EU primary legislation.

1.2.2 Provisions on own resources in EU secondary law

The Own-Resources Decision (ORD)

Since 1970, changes to the system of own resources have been introduced through a legislative act called the Own-Resource Decision (ORD). The most recent ORD was adopted on 26 May 2014\(^7\). As it is still subject to ratification it will apply retroactively from 1 January 2014\(^8\).

The ORD governs the different fundamental aspects of the EU’s own resources system. Article 2 of the ORD establishes three different categories of own resources: traditional own resources, VAT-based own resources and GNI-based own resources. It also defines the amount of the collection costs retained by the member states for the traditional own resources and the uniform call rate for VAT-based own resources.

Article 3 of the ORD sets out the ceilings for the Union’s budgetary appropriations\(^9\). The current ceiling for payments is set at 1.23% of the sum of all the member states’ gross national incomes (GNIs). The ceiling for commitments is slightly higher at 1.29% of GNI, because such commitments often cover project financing periods exceeding a single financial year.

Other articles deal with the UK rebate system (article 4) and its consequences for other member states (article 5), as well as providing the basis for the ‘making-available’ Regulation (Article 8) and the Implementing Regulation (Article 9).

The Implementing Regulation

The Implementing Regulation\(^10\) specifies the implementing measures such as calculation and budgeting of the balance or control and supervision measures as contained in Article 9 of the ORD.

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\(^6\) OJ 326/182. Consolidated version of the Treaty on the Functioning of the European Union.
\(^8\) Council Decision (EU, Euratom) No 2014/335 of 26 May 2014 is currently applicable.
\(^9\) While commitment appropriations refer to the legal pledges of financial activity entered into the budget, payment appropriations list those budget operations of actual cash or bank transfers.
\(^10\) Council Regulation No. 608/2014 laying down implementing measures for the system of own resources of the European Union.
The ‘making-available’ Regulation

The ‘making-available’ Regulation\(^1\) sets out the methods and procedure for making available the traditional, VAT and GNI-based own resources to the European Commission. It is based on Article 322(2) of the TFEU and contains provisions on the date of establishment of own resources, on the conservation of supporting documents, on administrative cooperation, applicable rates, entry on the accounts, entry in the accounts and reporting.

1.3 The structure of the revenue side of the EU budget

Revenue for the European Union budget falls into two categories: own resources and other revenues. While the own resources, which account for 98.9% of the EU’s total revenue, are determined by the ORD, other revenue constitutes the sum of various miscellaneous revenue. Own resources are currently financed through three revenue sources.

The following section gives an overview of the main characteristics of each own resource.

Figure 4: The structure of the Union’s revenue (GBE illustration)

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\(^1\) Council regulation No. 609/2014 on the methods and procedure for making available the traditional, VAT and GNI-based own resources and on the measures to meet cash requirements.
1.3.1 Traditional own resources (TORs)

When established in 1970, traditional own resources (TORs) were foreseen to be the main financing instrument for the Union’s budget. They are based on proceeds from customs duties, agricultural duties, and sugar and isoglucose\textsuperscript{12} levies imposed on economic operators. Traditional own resources can be regarded as the most genuine direct revenue stream of the European Union, since the Union enjoys exclusive competences in the area of customs union. The duties themselves are derived from the establishment of the European Single Market with a common custom code and external tariff for non-member countries.

The share of these genuine own resources has continuously decreased in recent decades. Today, only 12.9% of the EU’s total revenue stem from these levies and duties. This has rendered the budget less genuinely based on direct revenue generation than originally envisaged by the Treaties.

Since the EU does not have the means to collect the duties, the traditional own resources are collected by the member states on behalf of the EU. They have retained a certain percentage of the resources as collection costs which are deducted from the overall amount of revenue collected. Initially amounting to 10% of total traditional own resources, the deducted share was increased to 25% in 2001, but will be reduced to 20% after the ORD 2014 enters into force.

1.3.2 VAT-based own resources

In order to compensate for the diminishing revenue generated by the traditional own resources, the ORD of 1970 introduced a second own resource based on member states’ VAT base. First accrued in 1979, it is calculated according to a specific harmonised rule. Today, the VAT-based resource accounts for 13.1% of the EU’s total revenue.

Since there is no common VAT-regime in the European Union and in order to avoid any consequential distortions in the transfer of proceeds, call rates are applied to a statistical VAT base which is harmonised across member states\textsuperscript{13}.

The call rate applied to this harmonised VAT base has previously been subject to a separate calculation involving a predetermined ‘maximum call rate’ and a conditional rate depending on the size of the UK correction. Yet, the ORD of 2014 established a uniform call rate of 0.3%, but reduced rates for certain member states remain as a derogation to the general rate\textsuperscript{14}.

Furthermore, VAT bases are capped at 50% of GNI in order to avoid any regressive effects of this resource which may be higher and thus penalising for poorer countries with a higher share of domestic

\textsuperscript{12} ORD 2007 and 2014 defines them as revenue deriving from ‘levies, premiums, additional or compensatory amounts, additional amounts or factors, Common Customs Tariff duties and other duties established or to be established by the institutions of the Communities in respect of trade with non-member countries… as well as contributions and other duties provided for within the framework of the common organisation of the markets in sugar’.

\textsuperscript{13} This calculating system is also referred to as the “revenue method” and was first introduced in the Sixth Council Directive 77/388/EEC (accessed 11.04.2016) and then further specified in subsequent amendments. For each member state the harmonised VAT base is calculated by dividing the total annual net VAT revenue by the weighted average rate of VAT. The latter term represents an approximation of the average rate of the VAT applicable to various types of taxable goods and services. The result is the intermediate base. After it is adjusted with positive and negative compensations the harmonised VAT base is obtained.

\textsuperscript{14} The reduced VAT call rate for the period 2014-2020 is 0.15% and applies to Germany, the Netherlands and Sweden.
consumption. Proposals are on the table to replace the existing VAT-based resources with a new and more efficient revenue based on EU VAT rates. The HLGOR has referred to studies conducted by the European Commission examining such an option\textsuperscript{15}.

1.3.3 GNP/GNI-based own resource

In order to account for the differentiated economic development in the European Union and to complement the other own resources, the ORD of 1988 envisaged the introduction of a third own resource element. Until 2002 this resource was calculated based on the gross national product (GNP), but through a change in the European system of national and regional accounts (ESA 95) came to be replaced by a rate using gross national income (GNI). Throughout the past decades the GNI-based own resources has become the most important own resources with the largest share among all three resources, although it is far less genuine in nature and due to the intricate correction system constitutes rather national contributions in disguise.

Figure 5: Sequential calculation of the EU budget (GBE illustration)

The GNI-based resource is also known as the ‘residual’ resource as its size is calculated after both the TOR and the VAT-based resources are determined and added to the proceeds from other revenue and the surplus from previous years are accounted for. Therefore, the share and size of the GNI-based resource is determined by the difference between the appropriation ceilings and the sum of all other revenue. Through this procedure, an equilibrium ex ante of the EU budget can be guaranteed which ensures that the European budget cannot run a deficit.

After the size and share of the resource is determined, the call rate of the GNI-based resource is constructed using a uniform call rate for all member states. The level of the call rate depends on the

amount of missing revenue needed to complement TOR, VAT-based and other revenue in order to meet expenditure levels. The calculation also takes a number of national exceptions into account.

1.3.4 Exceptions on the income side of the EU budget

Several financing exceptions add to the complexity of the aforementioned system.

The UK rebate still constitutes the largest exception in the budget. It was introduced at the Fontainebleau summit in 1985 to compensate for the UK’s perceived disadvantages in receiving Community funding. The rebate is calculated as the difference between the percentage share of the UK in EU expenditure paid to the member states (total allocated expenditure) and the UK share in total VAT and GNI resources payments. This difference in percentage points is then multiplied by total allocated expenditure. The rebate guarantees that the UK is reimbursed 66% of this budgetary imbalance. The cost of this correction is shouldered by the other 27 member states.

In addition, the ORD of 2014 also grants special exceptions to other individual member states in the form of lump sums for the period 2014-2020: EUR 659 million for the Netherlands, EUR 185 million for Sweden and EUR 130 million for Denmark. Lump sums granted to Austria will phase out over three years, amounting to EUR 30 million in 2014, EUR 20 million in 2015 and EUR 10 million in 2016. The development of these national exceptions underlines the predominance of national negotiation which ultimately only adds to the EU budget’s complexity and wider undesirable implications.
2 What is wrong with the current budgetary system?

As implied in the previous section, the financing system faces severe deficiencies which are rooted in the current structure of the EU budget. The main deficits\textsuperscript{16} are:

- **Deficits relating to democratic accountability**
  1. Complexity and lack of transparency
  2. The fading of genuine own resources
  3. Insufficient parliamentary oversight

- **Deficits entailing economic inefficiency**
  4. The problem of late payments
  5. The absence of steering effects

Notwithstanding interconnections between these different issues, the following section will briefly discuss each deficit under the lens of democratic accountability (deficiencies 1, 2 and 3) and economic inefficiency (4 and 5).

2.1 The democratic deficiencies of the current own resource system

2.1.1 Complexity and lack of transparency

The first issue of democratic deficit within the budgetary structure of the EU stems from the high level of complexity of the current system as outlined above. With a large number of exceptions and rebates granted to individual countries, the system is far from providing a comprehensive, coherent and transparent account of how the EU is financed.

This damages democratic oversight and feeds into the perception of the EU as an opaque bureaucratic structure with few links to the everyday life of its citizenry. A reform of the budgetary system addressing and overcoming the current complexities could largely enhance the transparency and visibility of the EU, the lack of which persistently provides breeding ground for Eurosceptics across Europe. Furthermore, the active involvement of the European Parliament and national Parliaments could contribute to decreasing the widespread lack of democratic legitimacy.

2.1.2 The demise of genuine own resources

The second core problem is linked to the historically rooted decrease of genuine own resources which currently only make up slightly more than a tenth of the entire revenue. This development in which an ever larger share of the budget is financed by ‘de facto national contributions’ has increased the leverage of member states when negotiating the budget ceilings.

A key term in these negotiations is the notion of the ‘juste retour’, meaning the aspiration of member state governments to be able to claim their fair share in returns from European integration. Underlying this reasoning is the assumption that European integration can be regarded as a financial zero-sum game with national treasury transfers towards the European institutions representing the input or

\textsuperscript{16} Deficits 1 to 4 have been identified in the HLGOR’s first assessment report, the missed potential of the budget to steer investments has so far been ignored by the group.
burdened cost of integration and allocated European funding to the member states reflecting the beneficial output. This line of argument has become regrettably simplistic ammunition for populist politicians across Europe. Thus, it does not only fuel Eurosceptic sentiments in countries which are net payers according to such calculations but also increases pressure on budget negotiations on the European level, often neglecting the investment and spill-over potential of European funding. This simplistic approach is very misleading for example, in depicting real cost-benefit balances. It does not account for the discrepancy between funding registered and therefore entered into national budgets and actual financial allocation. Even though investment funds and structural funds are granted to specific beneficiary member states, funding is mostly further distributed to private companies whose shareholders can be spread European-wide. A German company operating in Athens can therefore be the ultimate beneficiary of structural funds allocated to Greece.

In order to overcome or at least constrain discussions on ‘juste retour’, two systemic problems of the current budget need to be properly addressed. First, as long as the budget remains as opaque due to the complex statistical construction of the VAT-based resource and correction adjustments, simplistic interpretations of cost/benefit calculations can easily be misused to fuel Eurosceptic attitudes within the European population. Second, the structure of the EU budget with a large majority of non-genuine resources gives member states incentives to take up the ‘juste retour’ rhetoric in order to maximise their net financial benefits at the domestic level curtailing efforts to increase EU payment appropriations and thus jeopardizing policy options which might be more beneficial for the EU as a whole.

This is why an increase in own resources and a decrease of the national contributions is both beneficial in terms of democratic accountability and budget effectiveness.

2.1.3 Insufficient parliamentary oversight

As mentioned before, the current composition of the EU budget with more than 80 % stemming directly from non-genuine resources is in contradiction with the Treaty of the Functioning of the EU (TFEU) which foresees for the Union to be financed “wholly from own resources”. The excess of de facto national contributions gives disproportionate leverage to member states and thus the Council vis-à-vis the European Parliament during EU budget negotiations. A move towards more genuine resources would therefore be in the interest of restoring democratic oversight on the budget and increase the European Parliament’s role and ownership during budget negotiations.

The lack of parliamentary ownership also extents to the national level. As stressed in the HLGOR first assessment report, national parliaments rarely debate EU own resources in the plenary. This summer, the HLGOR will convene an inter-institutional conference on the future financing of the European Union ensuring that the views of national parliaments are being taken into account before the Group presents its final report at the end of 2016.

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2.2 The efficiency problems of the current own resource system

2.2.1 Late payments undermine the EU’s ability to deliver its commitments

In the past years the number of late payments and unpaid bills, the so-called ‘payment backlog’, has dramatically increased to EUR 24.7 billion at the end of 2014\(^20\). According to the European Commission, this is mainly due to two developments. After the financial crisis, the Council unanimously decided to soften budgetary rules which previously provided strict requirements on the timing of payment claims for Cohesion policy programmes\(^21\). In the area of Cohesion policy, this softening led to a cyclical increase of payment claims at the year-end which amounted to an unprecedented amount of EUR 61 billion in the end of 2013. At the same time, payment ceilings were lowered in the MFF 2014-2020 which entailed a particularly drastic reduction of payment appropriations of EUR 8 billion in 2014\(^22\).

These budgetary constraints in the beginning of the 2014-2020 financial period have set in motion a snowball effect leading to the European Commission dedicating a share of payment appropriations to honour outstanding commitments from the previous year, the so-called ‘RALs’ from the French “reste à liquider”. The unprecedented accumulation of these outstanding commitments has severe repercussions on the smooth implementation of Union programmes since late payments for financial commitments can and have already slowed down implementation of 2014-2020 programmes\(^23\). The limited financial manoeuvre under the current MFF ceilings indicates that the Union is already using its authorised appropriations close to the maximum. The case of late payments underlines that a budget mainly funded through member state contributions runs the risk of being held captive against the backdrop of national budget consolidation. New resources need to ensure a higher degree of budgetary autonomy of the European Union in order to guarantee that EU programmes can deliver.

2.2.2 The absence of steering effects in EU revenues

The large majority of the components of the current budget system is statistical and does not mirror any European policy with specific added value. If resources capable of addressing certain market failures would be deployed, the own resource system could thus achieve a double dividend in guaranteeing sufficient resources and bringing the EU budget in line with policies closer to EU citizens and aiming at delivering European public goods and a higher EU added value. This could, according to the European Commission, support – and be closely linked to – “the achievement of important EU or international policy objectives, for instance in relation to development, climate change or the financial markets”\(^24\).

\(^21\) The so-called N+2/N+3 rule meaning that payment claims should be made two or three years after programme finance was initially granted. If a certain amount remains unclaimed by a member state at this point in time, the amount is decommitted which means that the member state loses its funding. At the end of 2013, the two decommitment rules applied at the same time leading to a particularly sharp peak in payment claims (European Commission, 2015e).
Persisting market failures hamper desperately needed investments. Addressing these market Europe is experiencing a negative long-term trend in investments which risks to exacerbate through the focus on austerity measures after the economic crises. The graph below shows the development of gross fixed capital formation of EU-15 countries since the early 1970s. Gross fixed capital formation is an indicator used in national and European accounting to estimate investments in non-financial assets. The first sharp declines can be attributed to the oil crises and their consequences on international investment flows during the 1970s and the second to the financial and economic crises of 2008 until today. Green own resources can pave the way for higher and more sustainable investments, for example through the correction of market prices and incentivising more sustainable consumer behaviour. In this vision the European budget could create synergies between the Union’s current international climate and energy targets and its internal mid- and long-term climate objectives.

**Figure 6:** Gross fixed capital formation as % of GDP, EU-15, 1970-2016

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**Note:** EU-15: AT, BE, DK, DE, EL, ES, FI, FR, IE, IT, LU, NL, PT, SE, UK. In constant prices (base year 2010).

**Source:** Data retrieved from European Commission, annual macro-economic database (AMECO).

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25 In particular with regards to Article 2 of the Paris Agreement on ensuring that financial flows are better exploited to reach the 2°C/1.5°C target and in light of the attainment of the sustainable development goals (SDGs).

3 Candidates for green own resources

The second half of this report focuses on potential green sources of revenue for the EU budget, ‘green own resources’.

A first section briefly explains the added value green own resources could contribute to a future EU budget. The second section presents the instruments which have already been addressed in proposals and preparatory documents of the European Commission. In the third part, these proposals are complemented by other possible ecological instruments which could serve as a basis for future own resources but which, so far, have not been considered by the European Commission. In the last part, four of the examined proposals, those that look most promising, are assessed in more detail.

3.1 Adding an ecological lens to the debate

The EU Budget has a transformative power. However, greening the economy is not achievable if we continue to pay polluters to pollute – we need transparent prices that tell the economic, social and ecological truth to create a stable climate for green and low-carbon investment. Green own resources could deliver this by establishing a level playing field across the 28 EU member states. They can offer a cost-efficient means of eliminating or reducing structural market distortions and of providing appropriate market signals by internalising so-far unaccounted externalities.

In addition, establishing a uniform call rate on specific environmental taxes would allow for new own resources to be more genuine to the European Union than the current system of direct national contributions. Democratic accountability could thus be enhanced since the mechanism of revenue collection through existing taxation is already well established in the member states and therefore easier understood by EU citizens.

In order to prevent an unfair or unequal burden on different member states due to a large diversity of current tax levels and tax regimes, a decision to consider environmental taxes would favour advances towards tax harmonisation across Europe. This could ultimately reduce tax competition and lead towards a better allocation of resources and more effective taxing of environmental “bads” strengthening the application of the polluter-pays-principle.

Evidence shows that climate change policies can increase competitiveness in the long term by encouraging greater innovation and efficiency. In the last years and especially during the financial and economic crisis, the green sector was the only one which grew and created new and sustainable jobs27.

If the main revenue streams for the EUR 143 billion EU budget were shifted to environmental tax-based instruments, these green own resources could greatly enhance European advances in environmental tax reform and also help to overcome the deficiencies apparent in the current system of financing the EU budget. They are a win win for the environment and for the future financing of the European Union’s budget.

3.2 New own resources revenue streams considered by the European Commission

In November 2011, amidst the process of the last negotiations on the 2014-2020 long term EU budget (MFF), the European Commission proposed amendments to the Own-Resources Directive (ORD) including several changes to the current system\(^{28}\), namely: the removal of the current VAT resource, the phasing out of the existing temporary and permanent correction mechanisms in favour of temporary individual lump sums and a reduction of the share of collection costs for Traditional Own Resources (TORs) retained by the member states from 25% to 10%. In addition, they proposed the introduction of two new own resources – one based on a Financial Transaction Tax (FTT) and the other being a new and improved VAT-resource.

The European Parliament welcomed the proposals to streamline the system, but the Council agreed only on temporary correction mechanisms granted to Denmark, Germany, the Netherlands and Sweden as well as a smaller reduction in TOR collection costs from 25% to 20%.

In a preparatory document, the EU Commission also analysed a number of additional potential future own resources\(^{29}\). Three of these candidates can be considered green own resource candidates:

- Auctioning revenue from the EU Emission Trading System
- Charges related to air transport
- Energy tax\(^{30}\)

Each one will be briefly presented below.

3.2.1 Auctioning revenues from the EU Emission Trading System

The idea to use part of the revenue of the European Union Emission Trading System (EU ETS) to contribute to financing the European Union budget was first made in the Budget Review 2010\(^{31}\). In light of the plan to move from 27 national permit auctioning authorities towards a more centralised EU level system, the possibility arose to include parts of the revenues generated by the auctioning of ETS allowances as own resources in the EU budget\(^{32}\).

In 2011, the Commission highlighted the political challenges of such an arrangement\(^{33}\). In light of the difficulties connected to the ETS’s efficiency and functionality, the Commission emphasised a step-by-step approach with regards to the potential inclusion of ETS revenue as own resources. First, legislative measures needed to be pursued to establish a central auctioning authority at EU level. Currently, three member states (Germany, Poland and the UK) have opted out of a common auction platform and have


\(^{30}\) The other three instruments analysed by the Commission are financial transaction tax (FTT)/financial activities tax (FAT), a new VAT resource and an EU corporate income tax (EUCIT). They will not be examined in more detail in this report.


\(^{32}\) Currently there are two auctioning platforms for allowances, one being the European Energy Exchange (EEX) in Leipzig, the second one the ICE Futures Europe (ICE) in London.

designated their own auctioning authority maintaining a decentralised auctioning regime. Second, the ultimate decision to integrate auctioning revenue as own resources should then be negotiated in a separate legislative chapter in order to prevent any reopening of the ETS Directive.

This option, however, must be seen within the context of the considerable limitations of the current ETS system in practice. The core problem is an artificially low carbon price due to the abundance of free allowances. Despite temporary exclusion of excessive allowances through the ‘market stability reserve’, this core problem is very likely to persist. Other policy options could be better suited to creating sufficient financial incentives within the carbon market to steer investments towards low-carbon patterns of production, and also more likely to generate a useful revenue stream for the EU budget.

Such an alternative would be an EU-wide carbon tax as discussed in chapter 3.4.3 in more detail.

3.2.2 Pricing air transport

Air traffic is the most climate-intensive form of transport and also the fastest growing transport mode. By 2030 CO₂ emissions from aviation are expected to rise by 300%\(^{34}\). Domestic and international aviation account for 6% of total GHG emissions in the EU, representing 13% of emissions from the transport sector\(^{35}\). Yet, aviation enjoys very favourable tax treatment. Neither fuel tax, nor VAT are currently levied on air transport and, according to Transport & Environment, 75% of GHG emissions caused by aviation have been removed from the EU ETS, due to the exclusion of flights starting or ending outside of EU airspace\(^{36}\). Although the European Commission stated in its 2011 Roadmap on Transport that such tax exemptions for aviation create “conflicting incentives with respect to the efforts to improve the efficiency of the transport system and reduce its external costs”, no substantial political action has followed aiming at correcting these distortions\(^{37}\).

Figure 7: Range of expected increase in CO₂ emissions from aviation in


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So far the European aviation industry has been successful in advocating against comprehensive approaches which would ensure consistency of taxation between all modes of transport in the EU. In an attempt to establish global standards on aircraft emissions, the EU is still negotiating with the International Civil Aviation Organization (ICAO). In October 2016, ICAO is expected to present a global market-based instrument aiming to ensure aviation’s contributions to the Paris Agreement agenda.

A European-wide aviation charge, to be used as a revenue stream for the EU budget, would be an efficient and overdue step to level the playing field on internalising social and environmental costs associated with air traffic.

### French and UK Ticket Taxes as a Model for a European Aviation Charge

In France, Jacques Chirac introduced a surcharge levied on passenger tickets, also known as the *taxe Chirac*. The amount of the levy depends on two factors: distance and travel class. For economy class travellers flying to destinations outside the EEA, the charge is EUR 4.51; for flights within the EEA, it is EUR 1.13. Passengers travelling business class pay a tenfold amount for each category.

The French ticket tax is particular in its differentiation of travel class, yet compared to surcharges in other countries (notably the UK), distance travelled could factor more in the price in order to account for the costs associated with CO₂ emissions on long-distance travel. A hybrid of the French and the British model could serve as a best practice example for a European air travel charge.

A charge on air transport remains a very promising candidate for EU own resources especially in terms of its environmental added value. The outcome of the ICAO negotiations this year will be decisive in signalling whether the introduction of an EU aviation charge is a feasible option to contribute to a future EU budget.

#### 3.2.3 Energy tax

Another potential green own resource option brought forward by the Commission is revenue from an energy tax revenue. As shown in the chapter below, this instrument is very promising and is therefore analysed more in-depth in chapter 3.4.4.

### 3.3 Further potential new green own resources

The selection of potential green new own resources by the Commission was rather limited. But, in theory, any type of revenue-generating market-based instrument (MBI) can be considered as a source

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38 The tax (in French « Taxe de solidarité sur les billets d’avion ») has been introduced jointly by several countries participating in the financing of an international public health organization ([Unitaid](http://unitaid.org)). Accessed 05.05.2016.

39 The UK applies a different surcharge according to four distance categories.

40 In light of the strong lobby pressure and the abolition of air ticket duties in several European countries (Denmark, Netherlands and Malta), a common approach to introduce air transport charges seems necessary.

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of future income for the EU if it meets some basic requirements such as sufficiency of revenue and no, or limited, effects on social equity. Market-based instruments refer to policy tools which aim at using market forces to address market failures of negative environmental externalities. Deployed as own resources they would – in contrast to the conventional own resources currently in place – have a beneficial effect on production and consumption patterns or pricing and investment signals.

There is a large range of environmental MBIs in place in different EU member states. The table below gives a short overview. Please note that the list is non-exhaustive as we tried to focus solely on the instruments most commonly used in each policy field.

Table 2: Overview of environmental market-based instruments currently applied in EU member states according to environmental area

<table>
<thead>
<tr>
<th>Environmental Area</th>
<th>Examples of instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>• Nuclear fuel tax&lt;br&gt;• Energy tax</td>
</tr>
<tr>
<td>Water stress and availability</td>
<td>• Water abstraction charges&lt;br&gt;• Water pricing&lt;br&gt;• Water trading&lt;br&gt;• Payments for ecosystem services (PES)&lt;br&gt;• Regional water board levy</td>
</tr>
<tr>
<td>Water quality: pollution</td>
<td>• Waste water charges/wastewater treatment levy&lt;br&gt;• Pesticide taxes&lt;br&gt;• Fertiliser taxes&lt;br&gt;• Groundwater levy</td>
</tr>
<tr>
<td>Air pollution and GHG emissions</td>
<td>• SO₂ taxes&lt;br&gt;• NOₓ taxes&lt;br&gt;• Particulate matter taxes&lt;br&gt;• Aviation/air ticket tax&lt;br&gt;• Carbon tax&lt;br&gt;• Road fuel tax</td>
</tr>
<tr>
<td>Waste management &amp; products</td>
<td>• Landfill taxes&lt;br&gt;• Incineration taxes&lt;br&gt;• Packaging taxes&lt;br&gt;• Pay-as-you-throw (PAYT) schemes&lt;br&gt;• Plastic bag tax&lt;br&gt;• Tax on disposable cutlery</td>
</tr>
<tr>
<td>Materials</td>
<td>• Natural resources taxes&lt;br&gt;• Aggregates taxes</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>• Pesticide taxes&lt;br&gt;• Fertiliser taxes&lt;br&gt;• Stumpage fees&lt;br&gt;• Wildlife and hunting fees</td>
</tr>
</tbody>
</table>

In order to qualify for EU own resources, the instruments need to fulfil a number of basic requirements relating to – among others – their budgetary qualities as well as to their impact on social equity. These assessment criteria will be briefly presented in the following section.

3.4 Preliminary assessment of candidates for own resources

The European Commission and the High Level Group on Own Resources (HLGOR) have identified a number of basic criteria for assessing the various policy options. These criteria relate to the economic, social and political implications of a candidate option. Any assessment of specific policy options for own resources needs to consider these different dimensions.

In addition, we propose a supplementary dimension to compare environmental impacts of the different policy options assessed.

Table 3: Overview of assessment criteria for policy instruments

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ECONOMIC DIMENSION</strong></td>
<td>Sufficiency: Would the revenues of the instrument be sufficient to cover the expenditures of the EU in the long run?</td>
</tr>
<tr>
<td></td>
<td>Stability: Would the instrument bring about stable revenues to the EU budget?</td>
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<td></td>
<td>Low operating costs: Would the instrument be simple to administer and involve low compliance costs?</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL DIMENSION</strong></td>
<td>Environmental impacts: Would the instrument contribute to the achievement of the EU’s climate and energy commitments?</td>
</tr>
<tr>
<td></td>
<td>Efficient allocation of resources: Would the instrument lead to an efficient allocation of resources in the EU?</td>
</tr>
<tr>
<td><strong>SOCIAL DIMENSION</strong></td>
<td>Horizontal equity: Would the instrument have an equal impact on equivalent taxpayers across the EU?</td>
</tr>
<tr>
<td></td>
<td>Vertical equity: Would the instrument involve income redistribution?</td>
</tr>
<tr>
<td><strong>POLITICAL DIMENSION</strong></td>
<td>Political feasibility includes various issues concerning the option’s visibility, potential perception among European voters and current political opposition or windows of opportunity.</td>
</tr>
</tbody>
</table>

The economic dimension: sufficiency, stability and low operating costs

EU own resources need to satisfy sufficiency and stability of revenue financing criteria. Sufficiency refers to whether the revenue generated is substantial enough to constitute a vital component of the EU budget. Since it is of interest for the clarity and thus transparency of the revenue to keep the number of own resources relatively low, each resource in turn should be able to cover a substantial share of the EU budget. At the same time, new own resources should be relatively stable over time. Experience with the current composition of the revenue has shown that a steady decrease in genuine own resources can have severe political implications for the EU as a whole. As we saw in the previous

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chapter, financial gaps in the revenue have historically been filled with non-genuine residual GNI resource. Low operating costs guarantee a more efficient resource use and less resources allocated to collection and administration of the instrument.

**The social dimension: horizontal and vertical equity**

In order to be suitable as a potential new own resource, an instrument and its socio-economic implications need to be perceived as a fair by the European citizenry. It should therefore have similar effects across the European Union and should not place a higher burden on vulnerable social groups. In this sense, social equity is divided into horizontal and vertical equity. Horizontal equity analyses whether the instrument has equal or close to equal impacts on equivalent taxpayers across the EU, i.e. would a Greek baker pay proportionally the same as his Swedish counterpart? Vertical equity on the other hand looks into top/bottom income redistribution and the instrument’s potential regressivity. It determines whether the revenue does not disproportionally burden the poor vis-à-vis high-income quintiles of the population.

**Gender equality**

In its assessment of candidates the European Commission has not mentioned the aspect of gender equality so far. Yet, certain tax regimes can be designed in such a way that they directly or indirectly affect genders differently. Often these effects are not necessarily intended in the tax design, but stem from socio-cultural settings present in the respective society and economy. Women are often put at a disadvantage, for example in countries that allow for a joint filing of the personal income tax with a progressive tax structure. Under these regimes the low-income earner (women’s salary is still lower than that of males in every EU member state) is taxed at a higher marginal tax rate. Since most green policy options for new own resources involve taxation or the levying of a charge of a certain kind, the potential for indirect gender bias is always given. However, we could not identify specific instruments having a particular effect on gender bias among the selection of policy instruments. Therefore, although a gender equality criterion was considered, it is not explicitly mentioned in the assessment below.

**The political dimension: snapshot of the current political landscape**

This criterion assesses the policy option’s potential to encounter political opposition delaying or hampering its adoption or implementation. Different factors such as public awareness of the targeted environmental problem, international debate on similar policy options or evolutions of past proposals are taken into account. It is important to note that the validity of any political assessment can only be limited due to a changing political environment.

**The environmental dimension**

It is the specific advantage of green own resources that they can attain a double dividend. Besides addressing the democratic and economic deficiencies of the current system, they can also facilitate the EU’s shared efforts in achieving its climate and environmental objectives. The potential environmental impact of an instrument is assessed through two elements: environmental impact and efficient resource allocation. Environmental impacts looks at the instrument’s beneficial effects on
environmental indicators such as GHG emissions and its contribution to the achievement of the EU’s climate and energy commitments. Efficient allocation of resources is considered positively if the instrument leads to a better and more sustainable resource and capital allocation; the improvement of price signals and effects on consumer and producer behaviour also fall under this category.

After having specified the different assessment dimensions, we will now narrow down the choice of potential green own resources by reviewing the list of candidates in light of the range of criteria in the next section.

3.4.1 Preliminary assessment of the proposals

Scrubnising the list of environmental market-based instruments, it becomes clear that some policy options can be quickly ruled out as potential sources of green EU own resources.

The following instruments can be considered unsuitable because they are unlikely to generate enough resources over time and therefore do not satisfy the sufficiency requirement for EU own resources:

- Water abstraction charges
- Water pricing, water trading
- Payments for ecosystem services (PES)
- Regional water board levy
- Wastewater charges/wastewater treatment levy
- Pesticide taxes
- Fertiliser taxes
- Groundwater levy
- Plastic bag fees
- Packaging taxes
- Tax on disposable cutlery
- Pay-as-you-throw (PAYT) schemes
- SO₂ taxes
- NOₓ taxes
- Particulate matter taxes
- Stumpage fees
- Wildlife and hunting fees
- Aggregate taxes.

Other candidates are questionable with regard to the horizontal equity condition since their implementation is likely have highly differentiated effects across EU member states:

- Nuclear fuel tax
- Water abstraction charges
- Payments for ecosystem services (PES)
- Water trading
- SO₂ tax
- Natural resources taxes
- Landfill tax
- Incineration tax

Finally, in respect of the subsidiarity principle, a number of these potential candidates should remain administered at regional or national level i.e. water charges, payments for ecosystem services (PES) and wastewater treatment.

This leaves three own resources to be analysed in depth in the following section: Road fuel taxes, carbon taxes and energy taxes. This selection should not be seen as an exhaustive or final list but other options will not be analysed further in this report.
3.4.2 Road fuel tax

**Overall rationale:** Road fuel taxes aim at addressing negative externalities derived from fossil-fuelled road transport which currently contributes to one-fifth of the EU’s total emissions of carbon dioxide and does not fall under the European Emission Trading Scheme. The transport sector also constitutes the only major sector where GHG emissions are still on the rise\(^42\).

Whereas emissions from other sources have decreased, road transport’s contribution to EU’s total emissions has increased by around half in the past 25 years. While they constituted 13% of total EU emissions in 1990, they accounted for nearly 20% in 2013. If the EU wants to advance on its climate and energy targets for 2030 and cut 40% of its GHG emissions from 1990 levels, it needs to find viable solutions to tackle these disconcerting emission trends in the transport sector\(^43\).

Additionally road transport is a major contributor to other air pollutants detrimental for human health, the environment and partially damaging to buildings and cultural heritage sights. In particular, road transport contributes 30% of total EU emissions of nitrogen oxides (NO\(_x\)), a pollutant whose concentration levels exceed EU air quality standards in urban areas across Europe\(^44\).

Another benefit of a common European approach to road fuel taxation would be reducing the distorting and environmentally harmful effects of fuel tax competition within the Union due to different tax levels applied in the member states. Currently, there are 71 borders between EU and non-EU countries which separate different fuel tax regimes and thus create potential for tax competition. If EU fuel taxes were fully harmonised this number could be reduced to 33\(^45\). The high diversification of tax regimes for road fuel and the large price differences cause tremendous distortions in the internal market. There are very significant incentives to drive extra kilometres in order to save money on fuel in a neighbouring country. Luxembourg is currently the main beneficiary of this fuel tourism. In 2014,

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\(^{43}\) Ibid.

\(^{44}\) For a detailed overview of the EEA’s findings on excess emissions, see annex III.

Luxembourg earned almost EUR 1 billion in road fuel tax revenue while Germany with a population 160 times larger than that of Luxembourg generated slightly more than EUR 30 billion\(^\text{46}\).

**BEST PRACTICE: UNITED KINGDOM**

The United Kingdom is currently the only country in the EU to apply the same tax rate to diesel and petrol (currently GBP 0.5795 per litre)\(^\text{47}\). The UK’s approach not to incentivise the purchase of diesel over petrol can be seen as a positive example in Europe in which indirect subsidies, especially due to preferential tax treatment for diesel, amounted to EUR 27 billion in 2014\(^\text{48}\).

Preferential taxation has led to a boom in diesel car sales in Europe. Apparently this development has disinterested the European car industry to keep up with leading emission-reducing technology. As the graph below indicates, Japan has now overtaken the EU in terms of having far lower CO2 emissions from new cars.

Data sources: Cames & Helmers, 2013, EEA 2014, JAMA 2015. EU data is based on NEDC testing while the same data is from its JC08 test. However, real-world CO2 emissions in the EU are 40% higher than its tests show, a gap that continues to grow.


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There are different options for road fuel pricing which can be implemented separately or as complementary measures:

- Gradually increase road fuel taxes
- A stepwise diesel/petrol alignment in order to address NOx emissions, air pollution and to phase out detrimental diesel subsidies. In France, Germany and Italy, the three countries with the highest diesel subsidies due to lower tax rates amounted to a combined subsidy of EUR 19 billion in 201449
- Introduction of a European Fuel Tax Agreement (EFTA) similar to the North American IFTA agreement

The latter option would establish a system of administration similar to the one that is currently established in North America under the so-called IFTA (International Fuel Tax Agreement)50. In that system, differences in tax rates across US and Canadian states and provinces can be upheld without tax tourism occurring. This is due to the fact that trucks are taxed not in the jurisdiction where they fill their tank, but rather according to the distance they drive in each tax jurisdiction. Although administrative cost are likely to be an issue in the beginning, the US example shows that the bureaucratic burden improved in comparison to the previous system and public acceptance remains high51.

In the following, road taxes as candidates for new own resources will be assessed in light of the criteria introduced in the previous section.

**Economic criteria**

**Sufficiency**

The figure below shows the current levels of overall tax revenue generated by existing fuel tax regimes on diesel and gasoline throughout the European Union in 2013. Each country’s figure is juxtaposed with its national share of the EU’s own resource financing. Michael Thöne (2016) showed that in 2013 total tax revenues from transport fuel excises amounted to EUR 167.4 billion, exceeding the EU’s annual budget of EUR 139.7 billion that same year. Thus, road fuel tax does generate sufficient funds to constitute a complementary and substantial future EU own resource52.

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52 According to Thöne’s calculation, a total transfer of road fuel tax revenues could, in theory, even be used to finance the EU budget in its entirety.
Figure 9: Excise tax revenues 2013 vs. total own resources (2013)


Stability

Fuel demand and consumption are relatively stable over time. According to Cattoir (2004), this is due to the fact that fuel prices account for only 23% of total transport costs. He refers to a simulation according to which even a large increase in fuel prices due to a rocketing oil price reduced transport demand and fuel consumption only by 2-3%.

Yet, as one of the intentions of a tax on fossil fuel road transport is to impact consumption and production patterns towards more sustainable behaviour it is likely that such a tax can contribute to shifting economic incentives away from the fossil fuel vehicle market and facilitating market conditions for alternative low-carbon modes of transport such as electromobility. In such a case, price advantages of vehicles not powered with fossil fuels are likely to decrease the aggregate use of gasoline and diesel as primary road transport fuel over time and in turn decrease the revenue generated by the tax. These diminishing returns can however be compensated through specific tax designs, for example by envisaging a gradual tax increase over time. Furthermore, such a shift in consumer and producer behaviour is not likely to occur within a short period of time. The moment when road fuel taxes become obsolete due to decreasing tax revenue is when the instrument has ultimately fulfilled its intention by design. As long as this point in time is reached this behaviour-affecting instrument can attain a double dividend.
Low operating costs

Since there is already a tax collection system for road fuel taxes in place in all member states, the additional administrative burden with regards to the road fuel tax as a potential own resource would largely lie in the determination of a call-rate and the management of the revenue transfer to the European level which can be considered minimal.

There is also the possibility of establishing a system of administration similar to the one that is currently established in North America under the so-called IFTA (International Fuel Tax Agreement). In that model differences in tax rates across US and Canadian states and provinces can be upheld without tax tourism occurring at the same time. This is due to the fact that trucks are taxed not simply in the jurisdiction where they fill their tank, but rather according to the distance they drive in each tax jurisdiction.

If such a system was adopted in Europe, it could require hauliers to record their distance travelled and fuel consumed in each member state. On the basis of the acquired data, the volume of fuel used in each jurisdiction as well as the tax owed by the haulier can be calculated. Ultimately, tax paid when purchased can later be reconciled against the actual fuel volume used. Hauliers would receive a rebate from some jurisdictions and would need to pay additional taxes to others. Under this system the actual travel trajectory would be taxed entailing that tax competition could be circumvented without harmonising tax rates across the EU. Although administrative cost are likely to be an issue in the beginning, the US example shows that the bureaucratic burden improved in comparison to the previous system and public acceptance remains high53.

Environmental criteria

Environmental impacts

Transport causes a number of externalities such as congestion, road accidents, air and noise pollution which could be addressed via a tax. There is also the substantial cost of building and maintaining road infrastructure to be considered.

Road transport is among the major contributors to emissions of GHGs and nitrogen oxides (NOx) in the EU. The figure below shows that nearly one fifth of the EU’s total carbon monoxide emissions stem from road transport and over 30% of NOx emissions.

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Figure 10: Contribution of the transport sector to total emissions of the main air pollutants


Data from the EEA published in 2013 show that heavy duty vehicles and buses, light duty vehicles and passenger cars together accounted for 71.2% of total transport GHG emissions, with the latter contributing 43.2% alone (see figure 10). Given the fact that the transport sector represents the only major sector in which GHG emissions are actually increasing rather than decreasing, the EU needs to take urgent action to address and reverse this worrisome trend, especially in light of its target to reduce transport GHG emissions by 20% in 2020.

Efficient allocation of resources

Due to the current absence of harmonised fuel tax rates across Europe, member states can profit from tax competition and thus profit from disproportionate fuel tax revenue relative to their neighbouring countries. Luxembourg, for example, taxes diesel only slightly above the minimum rate adopted under the EU Energy Tax Directive. Due to the significant differences in diesel taxation between Luxembourg and its neighbouring countries, the sale of diesel per person is 5 to 8 times higher than in Germany, Belgium and the Netherlands and generates fuel tax revenues per inhabitant 4 to 5 times higher.54

Better coordination or a move towards tax harmonisation could end this race to the bottom and its distortional effects for the European economy and the environment.

Another decisive improvement would concern the reduction of fossil fuel subsidies by aligning the petrol and diesel tax rate in all member states other than the UK which already has a harmonised rate.

According to a report by Transport & Environment, the total indirect subsidy to diesel cars due to lower taxation amounted to EUR 26.7 billion in the EU-28 in 2014.  

**Social criteria**

**Horizontal equity**

Horizontal equity depends on the degree fuel taxes across Europe could be harmonised. Even in the case of full harmonisation, due to the EU’s borders with non-member countries, those citizens residing close to borders with lower-taxed fuel could still continue with fuel tourism, but the effect of this on overall horizontal equity can be considered marginal.

Across member states citizens have similar consumption patterns with regards to their transport expenses. The European Commission has found that in 2012 on average 13% of total household expenses dedicated to consumption were spent on transport. For the large majority of countries the share of transport expenses ranged between 10% and 15%. Thus, it can be expected that the instrument does not exert highly differentiated effects on different member states’ income.

**Vertical equity**

It is often argued that environmental taxation exerts negative effects on real incomes via consumer prices. That means that lower-income groups lose a larger proportion of their real incomes than do higher-income groups. This argument is usually brought forward in relation to taxation triggered to increase energy or heating prices, because energy expenses comprise a larger part of low-income group’s costs. Yet, the distributional effects on road fuel taxation show a much more diverse picture. From all the tax-based instruments discussed in this report, transport fuel tax has the most favourable effects on vertical social equity. A 2015 study of the OECD on distributional effects of energy taxes in 21 OECD-member countries showed that while taxation on energy consumption showed regressive effects, taxes on transport fuel yielded proportional to progressive distributive effects in the majority of analysed countries. In comparison with other environmental tax instruments discussed in this report, transport fuel tax has the most favourable effects on vertical social equity anywhere. At the same time, environmental taxes tend to be less regressive than other forms of taxes for example labour or value-added taxation.

**Political feasibility**

There is currently a strong positive momentum to address better regulation of road transport emissions. The ‘Dieselgate’ scandal has underlined that European standards require better

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57 Taxes affecting heating fuels or general energy consumption tend to hit poorer households harder compared to high-income groups in the population. Whereas heating and electricity are much more considered a necessity, low-income groups tend to spend less money on motor vehicles and transport compared to richer households.


enforcement to ensure that the EU is not getting even more off track on its emission targets. At the same time the low oil price offers the unique opportunity to use fuel taxation in a smart and cost-efficient manner. The proportionally lower share of the tax would make a tax increase less costly compared to periods of higher oil prices.

On the other hand, transport and mobility are sensitive political issues and politicians may face a lot of resistance. However, public awareness about air quality, health, urban development and quality of life is quite high. Cities such as Madrid are considering banning diesel cars and Paris plans to ban cars on key streets once a month\textsuperscript{61}. Prominently, German finance minister Schäuble has brought up the idea to use revenue from a European fuel levy to help finance the management of refugee allocation\textsuperscript{62}.

Overall, a European own resources based on road fuel taxation is a desirable option, because while providing financial stability it can streamline European action to get road traffic emissions comprehensively under control, reduce the distorting market signals that currently favour diesel consumption and pave the way for investments in cleaner and healthier mobility technology.

Summary of preliminary assessment for road fuel taxes

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3.4.3 Carbon Tax

**Carbon taxes as an EU budget own resource could:**
- Constitute a leap forward in ensuring effective carbon pricing in Europe;
- Underscore the EU’s dedication to deliver on its international commitments under the Paris Agreement and the UN Sustainable Development Goals;
- Comprehensively tackle GHG emissions not covered by the EU ETS;
- Ensure the EU is back on track for its commitments under the Effort Sharing Decision;
- Systematically direct consumers and producers towards low-carbon patterns of behaviour.

**Overall rationale:** CO₂ emissions do not stop at national borders. Therefore, it makes sense to address the issue at EU level, for example via a new own resource, which sets a minimum price for CO₂ emissions in non ETS-sectors. Member states are free to apply higher tax rates in order to align the minimum rate with existing national carbon taxes or in order to cover more CO₂ emissions.

The objectives of an EU own resource carbon tax would be to ensure consistent carbon pricing and to create a real level playing field between different energy sources, to provide an adapted taxation framework for renewable energy sources.

A carbon tax is a duty that is levied on the carbon component of fuels by imposing a tax on each unit of greenhouse gas emissions. Carbon taxes, unlike emission trading schemes do not guarantee a predictable level of reduced GHG emissions. However, by setting the adequate price signals, they contribute to disincentive the use of high-carbon sources of energy and thus drive take-up of low-emission activities, as experiences of implemented carbon taxes show (see below). By doing so, it gives tax payers an incentive to reduce pollution whenever doing so would cost less than paying the tax. The objective of a carbon tax is to help to ensure that the true costs of fossil fuels as well as the benefits of clean energy are reflected in the market. In other words, it is an instrument to implement the polluter pays principle. This leads to the promotion of cost-effective investments in emissions reductions and in innovative low-carbon technologies and creates employment in the context of a climate friendly and resilient economic and energy transition.

A number of European countries have currently introduced carbon taxes in their national jurisdictions[^63], but the majority of European member states do not fiscally target carbon content yet. Nordic countries were the first to introduce carbon taxes in the early 1990s and can be considered role models for other European countries which aspire to the introduction of a domestic carbon tax.

[^63]: The countries currently taxing carbon include: Denmark, France, Finland, Ireland, the Netherlands, Portugal, Sweden and the UK.
BEST PRACTICE: FRANCE AND SWEDEN

Existing carbon taxation regimes differ according to the rate of the tax, but also to the exemptions from taxation. In France, for example, which in 2014 started to gradually implement a CO₂ tax, the current rate of EUR 22 per tonne of CO₂ applies to gas, heavy fuel and coal based on the content of CO₂ not covered by the EU ETS.

Another example is Sweden. Although exemptions have increased in recent years, the Swedish carbon tax introduced in 1991 has remained a strong factor explaining why Sweden has accomplished impressive sectoral reductions in GHG emissions in the past 20 years. At EUR 148 per tonne of carbon the Swedish carbon tax rate is by far the highest in Europe. Yet, Sweden has remained in the top ten most competitive countries on a global comparison.

The EU has committed to bring taxation more closely in line with the EU’s energy and climate change objectives. With the withdrawal of the review of the Energy Tax Directive in early 2015, the attempt to align taxation with the needs of the new energy system failed. The proposal aimed at addressing problems which emerged in the Internal Market in terms of unfair competition, introducing a carbon element into energy taxation and ending a lack of coordination between ETS and non-ETS carbon pricing. It suggested splitting the minimum tax rate into a carbon component fixed at EUR 20 per tonne of CO₂ and an energy component i.e. on the actual energy that a product generates measured in Gigajoules (GJ). The minimum tax rate would be fixed at EUR 9.6/GJ for motor fuels, and EUR 0.15/GJ for heating fuels.

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In light of the Paris Agreement and the UN Sustainable Development Goals adopted in September 2015, an ambitious CO₂ tax would also set an important signal that the EU takes its global responsibility seriously.

This is why a CO₂ tax as own resource is a highly interesting option, not least because it performs very well in terms of all the assessment criteria.

**Economic criteria**

**Sufficiency**

According to the World Bank, only 12% of global greenhouse gas emissions are currently covered by explicit carbon prices. An EU own resource carbon tax could broaden the use of carbon pricing, deepen existing carbon pricing programs and thus enhance implementation with rising ambition sufficient to replace a part of the direct GNI-based member state contributions.

In light of the failure to align the existing Energy Tax Directive with the current energy landscape that changed significantly within the last decade, i.e. in terms of a larger share of renewables and biofuels (see above), an own CO₂ resource could complement the outdated Energy Tax Directive in place. The existing minimum rates for energy products under the Energy Tax Directive are mainly based on volume (EUR/1000l) and are set according to historical rates in the member states. This creates unfair competition between fuel sources and unjustifiable tax benefits for certain types of fuel compared to others. Currently, coal, the most emitting energy source, is the least taxed and ethanol is the most taxed. This creates an absurd situation whereby the EU hinders itself in achieving its own targets. This should be addressed with a CO₂ tax.

According to the Impact Assessment of the Energy Tax Directive, a CO₂ tax of EUR 20 per tonne of CO₂ on all non-ETS emissions has a budgetary potential of about EUR 40 billion in 2020 for the EU 27. Hence, the potential tax revenue cannot be expected to cover the total of EU revenue. Yet, it could contribute to a significant share.

**Stability**

The CO₂ tax rate should be adjusted gradually to keep the revenue at a substantial level. This is in contrast to the pricing mechanisms of a cap-and-trade-system which first predetermines the amount of emissions permitted and leaves the determination of the carbon price to supply and demand of permit allowances. Therefore, a CO₂ tax can avoid the core problem of the EU ETS, consisting of an oversupply of allowances which has kept the price of carbon far below any level that would create credible financial signals to steer investments towards low-carbon development.

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A gradual increase of the CO₂ tax that is communicated in a predictable and transparent way would not only compensate for the losses attributed to lower consumption of high carbon content fuel, but would also increase incentives for cleaner technology, thus enabling a much smoother transition period towards the low-carbon economy. France, for example, introduced a levy on carbon in 2014 and is planning to increase the levy from EUR 22 per tonne of CO₂ in 2016 to EUR 56 per tonne in 2020 and EUR 100 in 2030⁷¹.

**Low operating costs**

A comprehensive carbon tax is straightforward to administer, simply requiring charges on fuel use in proportion to their carbon content. Charges could be administered on domestic fuel supply at the extraction stage (for example, mine mouth or wellhead), or after processing (for example, at coal “washing” plants, the refinery gate, or fuel distributors). These charges would build on existing fuel taxes, which are well established in most countries and among the easiest of all taxes to administer. In Sweden administration costs for carbon and energy taxes are estimated at 0.1% of the taxes’ total revenue⁷².

**Environmental criteria**

**Environmental impacts**

Carbon taxation directly addresses CO₂, one of the most relevant environmental externalities. The Impact Assessment of the withdrawn proposal to revise the EU Energy Tax Directive estimated that total CO₂ emissions would reduce by up to around 2%, addressing households, transport, small businesses and agriculture that are outside the EU ETS. These emissions account for approximately 55% of total GHG emissions in the EU⁷³.

National targets for non-ETS emissions reductions are established under the Effort Sharing Decision (ESD). However, several countries are currently not on track towards achieving their commitments, realising the targeted share of renewable energy in their national energy mix and improving their energy efficiency levels⁷⁴. According to the latest assessment of the European Environmental Agency Ireland and Luxembourg are likely to miss their GHG emission reduction targets under the Effort Sharing Decision for the period 2013-2020 by more than 10%. Introducing a tax on carbon throughout the EU could be an effective tool to put in place a common pathway towards significantly decreasing GHG emissions of sectors not covered by the EU ETS beyond 2020.

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⁷¹ In December 2013 the French parliament approved a domestic consumption tax on energy products based on the content of CO₂ on fossil fuel consumption not covered by the EU ETS. A carbon tax of EUR 7/tCO₂ was introduced from April 1, 2014 on the use of gas, heavy fuel oil, and coal, increasing to EUR 14.5/tCO₂ in 2015 and EUR 22/tCO₂ in 2016. From 2015 onwards the carbon tax will be extended to transport fuels and heating oil.


At the same time an own resource carbon tax would send a signal to help meet the goal of the Paris Agreement to hold the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C.

**Figure 12:** Progress of member states towards 2020 climate and energy targets


**Efficient allocation of resources**

Carbon pricing has gradually been identified as a core objective of the international community to address the market failure of growing greenhouse gas emissions⁷⁵. The failure to internalise the detrimental effects carbon emissions exert on the climate, public health and international security ultimately constitutes an indirect state subsidy according to leading economists⁷⁶.

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⁷⁵ Article 2(c) of the UNFCCC Paris Agreement sets out the objective for the Parties to the Convention entailing to “making finance flows consistent with a pathway towards low greenhouse gas emissions and climate resilient development” (UNFCCC (2015). Adoption of the Paris Agreement. Twenty-first session of the Conference of the Parties. Published 12 December 2015, accessed 11.04.2016).

Environmentally harmful activities are still subsidised by public budgets. A report commissioned by the European Commission in 2014 revealed that the subsidies and externalities of fossil fuel and nuclear based power and heat represent a cost of EUR 262 billion per year, compared to EUR 58 billion for renewables and energy efficiency\(^77\).

**Social criteria**

**Horizontal equity**

Member states and citizens have to pay annually up to EUR 42.8 billion to compensate for the negative social and health impacts of CO\(_2\) emissions\(^78\).

While most countries still do not have a proper carbon tax in force, but with more and more countries considering an introduction, a carbon tax could encourage to internalise these externalities.

**Vertical equity**

Carbon taxation tends to be more regressive than motor fuel taxation. This is because it is generally applied to a wider range of energy carriers and therefore increases the end consumer price of electricity and heating fuel prices, depending on the country-specific tax design. Therefore, the vertical equity impact of a new CO\(_2\) tax own resource would depend largely on if and how member states decided to recycle the revenue from this tax. As the EU level would only set a minimum rate, member states should be encouraged to levy a higher tax rate in order to recycle the revenue i.e. by lowering labour taxes and thus promoting job creation\(^79\). They could also use part of the revenue to compensate households, particularly low-income ones with lump sum payments or with a reduced rate for energy products used in domestic heating. These compensation schemes are very common in member states which already introduced a CO\(_2\) tax.

**Political feasibility**

It would be possible to make the carbon tax visible for consumers as a declared share of their energy taxes. The Swedish case shows that visibility of the tax together with an open public debate can foster the tax’s acceptance even for a comparably high tax rate. The Eurobarometer on citizens’ attitudes towards the environment shows that Sweden, despite having the highest carbon tax rate by far, is among the top three countries judging environmental taxation as being an effective tool to address environmental challenges\(^80\).

There is also political momentum in terms of a public debate around the Paris Agreement and a global acknowledgement that the earlier climate adaption measures are implemented, the more likely it is to meet the aim of reducing global warming to 2°C/1.5°C compared to pre-industrial levels.

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Summary of preliminary assessment for carbon taxes

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3.4.4 Energy Tax

Energy taxes as an EU budget own resource could:

- Generate stable and sufficient revenue to replace or complement the existing own resources;
- Increase energy efficiency and energy saving, improve energy security and diversity and promote renewable energy;
- Build upon existing collection structures in all member states and be easy to administer.

Overall rationale: An EU own resource based on energy taxation would favour the use of renewable energy and encourage energy efficiency. By taxing energy resources on the basis of their energy content rather than on volume the proposal would remove current inconsistencies. At the moment, the most polluting energy sources like coal are the least taxed. On the contrary, biofuels are amongst the most heavily taxed energy sources in spite of the EU’s commitment to increase the share of renewable energies. One consequence would be that due to its higher energy content, diesel would be taxed at a higher rate per litre than petrol which would help to align diesel and petrol rates (see also chapter 4.4.2).

An energy tax-based own resource could provide a coherent approach on energy taxation across the EU by addressing a patchwork of national policies and help to create a level playing field for cross-border businesses. It could also be an opportunity for member states to redesign their tax policies in a way that creates employment by shifting taxes way from labour towards energy use.
At EU level, energy taxation is governed under the 2003 Energy Tax Directive which sets minimum tax rates applicable throughout the Union. A reform aiming to complement the existing energy taxes with a tax on the carbon component has been blocked by member states\(^81\). But the current EU energy tax regime is far from being efficient. Renewables are taxed at the same rate as the energy source they are intended to replace but as the current tax rate is based on volume, rather than energy content, products with lower energy content such as renewables carry a heavier tax burden compared to the fuels they are competing with. Hence, there is no signal to reflect the energy content of the product used, no incentive to develop markets for alternative energies and hence no sufficient coverage of 55% of total GHG emissions.

The EU wants to retain its credibility as a global leader on climate and energy, and for that it needs to be able to spur compliance with its energy and climate targets. Under the EU 2020 framework, member states committed to improve their energy efficiency levels by 20% by 2020. However, with eight member states likely to miss their national targets (see figure 14), the overall energy efficiency improvement is expected to amount to just a 15.7% increase in 2014 according to a Commission communication on the 2016 country reports\(^82\).

In turn, energy efficiency commitments for 2030 were rather modestly set to 27% in contrast to the Commission’s proposal of 30%. In addition, the 27% increase is only binding at EU level and not broken down into national targets as is the case for the 2020 targets and therefore risks being less enforceable. This raises the “what-if” question of a gap filling mechanism if the EU is not able to deliver and thus risks locking Europe further into fossil fuel dependence and reliance on imported energy currently accounting for 53.2% of total energy use in the EU-28\(^83\).

Progress on energy efficiency is entailed with developing cost-efficient infrastructure for a low-carbon economy and it is therefore in the EU’s common interest to make sure that each country contributes to the EU’s overall trajectory. Integrating energy taxes as an own resource could stress the EU’s efforts in enhancing energy efficiency in a cost-efficient way.

One advantage of energy taxation over carbon taxation when considering potential EU own resources candidates would be that every member state already has energy tax regimes in place. The controversy on carbon-based taxation could therefore be circumvented by relying on a tax base which is already well established in all member states.

### Economic criteria

#### Sufficiency

In its 2004 report on the operation of the own resources system, the European Commission stated that “EU rates below half of the minimum rates would be enough to finance half of the current EU budget”

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\(^81\) In 1992 the Commission already proposed a joint energy/carbon tax which was later met with strong opposition in the Council and was hitherto withdrawn. The proposed revision of the 2004 Energy Tax Directive had a similar fate, being withdrawn in 2015 after no agreement could be made in the Council of the European Union.


making energy taxation a very attractive candidate for future own resources. Energy taxes make up 77% of total environmental taxation across the European Union. With total revenue from environmental taxes in 2013 amounting to over EUR 343 billion, energy taxes would therefore generate roughly EUR 263 billion annually, sufficient resources to cover the entire annual EU budget or to provide for a substantial share of own resources co-financing.

There is another important aspect and this is economic efficiency. A very new own resource will need to prove its cost-effectiveness and indeed, modelling suggests that, when levied on top of existing taxation, energy taxes would cause less economic harm per unit of revenue than direct, i.e. income or indirect taxes, i.e. VAT, while also enhancing energy independence, energy efficiency and emissions reduction. According to modelling in Poland, Hungary and Spain, direct taxes could have twice as much negative impact on GDP as energy taxes which raise the same revenues between 2013 and 2020. Indirect taxes (VAT) appear less damaging than direct taxes but still tend to perform slightly worse than energy taxes.

**Stability**

Figure 13: EU-28 revenue from energy taxation as percentage of GDP, 1994-2014

Source: Own illustration. Data from OECD statistics, environmentally related tax revenue.

Since energy taxation is mostly linked to energy consumption, energy taxes appear to be a very stable source of revenue. In addition, energy demand is very inelastic to price change which means that tax revenue generated can be durable over the medium-term in the absence of external shocks. Revenue from energy taxation as a percentage of GDP has been largely stable in the past twenty years with an EU average ranging between 2.5% and 2.8% of EU GDP (see figure below).

**Low operating costs**


Additional operating costs are limited. The main administrative bodies are already in place and further bureaucratic expenses will only be linked to the management of the transfer of energy tax revenues to the European Union budget. Operating costs can therefore be considered similarly low as in the case of transport fuel tax.

### Environmental criteria

#### Environmental impacts

Levelling the playing field on energy taxation could pave the way for a more coordinated approach towards energy savings and energy efficiency.

The COMETR project, which investigated the effects of green tax reforms in Denmark, Germany, Finland, the Netherlands, Sweden and United Kingdom, found that all the countries had both a higher level of economic activity and lower fuel use and greenhouse gas emissions than under a ‘business as usual’ scenario i.e. if the reform had not taken place. Tax reforms were assumed revenue-neutral in all cases and the revenues from higher energy taxes were used mainly to reduce income taxes or the employers' and employees' social security contributions. This revenue recycling was the main cause of beneficial economic impacts in the study.

#### Efficient allocation of resources

From an ecological perspective, policies fostering energy efficiency have a more indirect effect on emission mitigation than do ceilings on GHG emissions or deployment of renewable energies, because saved energy due to more efficient use or technology could be ‘eaten up’ through increases in the general level of energy used. Such rebound effects should be neither neglected nor exaggerated. Broad consumption taxes such as energy taxation may not be able to differentiate on emissions per se, but could well contribute to shift consumer and producer behaviour towards more energy-efficient, sustainable behaviour patterns and less energy consumption.

### Social criteria

#### Horizontal equity

Currently, the minimum tax rate on energy products as contained in the Energy Tax Directive (COM/2003/96) still leaves a lot of room for tax competition and thus differentiated application of largely different energy tax rates. These differences can be explained by different economic but also climatic conditions. For example country-specific energy consumption patterns due to longer heating periods in Northern countries and cooling in Southern countries add to the current tax patchwork. Increasing minimum tax rates and therefore enhance tax rate approximation is therefore needed in order to circumvent unequal burden-sharing among EU member states.

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87 For the results of the COMETR project, see the [website](#).
88 The divergence of applied tax rates have been tremendous in certain areas in 2015. Gas oil for non-business heating for example varied between the minimum rate of EUR 21 per 1000 litres mentioned in the ETD (as applied in Lithuania) and EUR 484 in the Netherlands (European Commission (2016c). Excise Duty Tables. [REF 1045 rev1](#)).
Cattoir has stressed that if tax rates were to be further harmonised, the application of equal treatment would be possible with regards to European taxpayers\textsuperscript{89}.

**Vertical equity**

The major problem with a broad-based energy tax is that in contrast to taxes on transport fuels, energy taxes would increase the price of heating products which usually burden poorer households more than well-off parts of the population. On a national level, this regressive effect of energy taxes affecting heating products can usually be compensated through earmarked spending directed at those who shoulder the costs of the tax disproportionately\textsuperscript{90}. However, since specific revenue within the European budget cannot be earmarked to a certain expenditure item, the magnitude of vertical equity effects depends on tax recycling measures at member state level. Vivid Economics (2012) suggests that costs are in the region of 10 per cent of the new tax revenues. A monthly or quarterly lump sum assistance to eligible households paid via energy bills, the size of which is determined by historical energy consumption is – compared to the overall positive impact of an energy tax, a recommended option.

**Political feasibility**

There might be more support for energy taxation if its merits relative to alternative forms of taxation were better understood and if the choice were presented as an alternative to income or value added tax.

In the current situation, a carbon tax might be slightly more accepted by the wider public than an energy tax, especially in those countries where a CO\textsubscript{2} tax exists. This might be due to the raising awareness of climate change and related costs, i.e. for the social welfare state in terms of health costs and in light of the Paris Agreement and/or the Sustainable Development Goals.

Politicians might still favour energy taxes because they appear to be more stable and easier to administer.


\textsuperscript{90} For example by recycling and lowering personal income taxes or social security contributions for lower income groups as it is the case during an environmental fiscal reform.
Summary of preliminary assessment for energy taxes

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3.4.5 Revenue from European Court rulings

In order to broaden the perspective on alternative revenue sources, the following section discusses a fourth potential candidate alongside these purely ecological revenue sources: revenue generated from fines imposed by the Court of Justice of the European Union (CJEU). Although not having a direct environmental steering effect, it can still be regarded as a revenue source with the potential to address market failures and corrosion of the Internal Market.

Paradoxical as it may seem, revenues generated by the Court of Justice, although formally listed in the EU budget, are not considered own resources and are currently merely used to reduce the share of each member state’s GNI contribution without being genuinely available to the European institutions.

If properly incorporated into the own resource system, fines could significantly improve budget cohesion and provide substantial EU value added.

Revenue from CJEU fines as an EU budget own resource could:

- Make the revenue generated by the Court of Justice available to the EU institutions;
- Put an end to its serving as a means to merely reduce EU MS national contributions;
- Underline the EU’s role in enforcing the rule of law within the Internal Market and addressing market failures and infringements of competition rules.
Overall rationale: Safeguarding the proper functioning of the Internal Market is a core competence of the European Union. Yet, fines imposed on companies in breach of EU competition law or member states for infringements or non-compliance with EU rules do not feed in the EU budget as own resources and are therefore not directly available to the EU institutions. This paradoxical situation leads to considerable amounts of fines – EUR 4.5 billion representing around 3.2% of total EU budget in 2014 – to be used to reduce member states’ GNI contributions rather than being spent on policies with a European added value. Especially during a period of increasing outstanding payments the non-availability of these truly genuine revenues seems unnecessary and counterproductive.

Although these revenues are not ecological per se, they represent a key instrument ensuring fairness and functioning of the Internal Market and therefore address a central objective of European integration. They may be formally part of the EU revenue as they are listed under “other revenue”, but are not part of the EU’s own resource system entailing that they are not made available to the European Commission.

Currently, most fines stem from two different sources: First, fines imposed on companies found in breach of EU competition legislation. And second, penalty payments member states pay for non-compliance and late implementation of EU law.

Figure 14: Fines imposed on companies for breaching EU competition law on cartels (TFEU Art. 101), 1990-2014


Breaches of competition rules (merger control, antitrust and cartel provisions, price-fixing, abuse of dominant market position etc.) generate increasing revenue through fines imposed by the Court of Justice of the European Union based on Articles 101 and 102 TFEU. In 2004, the Microsoft Corporation was sentenced to pay a historic record sum of EUR 497.2 million as a fine for its abuse of market

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power. In general, revenue from fines on companies infringing EU antitrust legislation shows a very large increase over the last 25 years (see figure 16).

The second component of fines concerns financial sanctions on member states judged to be in breach of EU legislation in line with Article 260 TFEU. The size of these payments is – similarly to EU competition infringements – proportional to the gravity of the wrongdoing taking into account duration and severity. In 2014, penalties imposed on member states on the basis of Article 260 TFEU amounted to EUR 49.4 million representing around 1.18% of total fines entered into the budget. In the context of macroeconomic policy coordination fines imposed for example under the excessive deficit procedure also feed into the EU budget. While sanctions imposed on a member state whose currency is the euro are assigned to the European Financial Stability Facility (EFSF), penalties paid by non-euro area member states are listed under other revenue in the budget.

Since fines are not added as additional revenue, they do not increase the overall budget, but are included in the calculations determining the size of member states GNI contributions for the upcoming financial year. This implies that a part of the penalty payments paid by member states judged to be in breach of EU competition law virtually flow back to the respective countries in form of reductions of their GNI-based resources. The current state of play that member states financially benefit from the EU’s efforts to address market manipulations without leaving the EU any scope for own resources derived from these imposed sanctions is bizarre and unacceptable.

The European Parliament has been vocal in addressing this inconsistency. In the current draft report on the MFF revision/review it states that proceeds resulting from fines imposed on companies in breach of EU competition law as well as penalties imposed on member states due to non-compliance with EU legislation should automatically flow into the EU budget without being exclusively used to curb member states’ national contributions. The report stresses that these surpluses “should be budgeted as extra revenue in the EU budget, with no corresponding adjustment of the GNI contributions”.

In order to change this situation, two options are possible:

- Introduce proceeds from CJEU fines as a new own resource through an ORD, or
- Assign fines and penalties to a specific EU-related purpose through an amendment of the financial regulation.

The decision to integrate fines as a proper new own resource is certainly the politically more ambitious path. In this case the European Commission should put forward a proposal to include fines imposed by the Court of Justice of the EU as own resources under a future Own-Resources Decision (ORD). Given the strong position of the Council in the special legislative procedure on the ORD, the proposal may encounter strong opposition from national governments since they currently benefit most from this arrangement. Nevertheless, arguing for the integration of fines as own resources would reinforce

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budgetary coherence and would make already genuine European revenue a formally recognised own resource available to the EU.

The second option, assigning fines and penalties to a specific purpose, would not go as far as the first option, but would constitute a pragmatic alternative option. Under this option fines would still be listed as other revenue, but the possibility to use them in order to reduce national contributions would be curtailed. A specific feature of the European budget stems from the so-called ‘non-assignment rule’ which states that budget revenue may not be assigned to specific expenditure items in the budget. This means that total revenue is pooled and used to finance expenditure without distinction. The financial regulation specifies exceptions to this rule, for example interest on deposits and the fines provided for in the Regulation on speeding up and clarifying the implementation of the excessive deficit procedure which, as mentioned above, flow into the EFSF. In the same spirit the financial regulation could be amended in order to include specific provisions on how fines and penalties would be exempt from non-assignment and thus reserving them for specific expenditure purposes. The specific purpose could be debated and could take the form of a special EU fund with a wide potential range of objectives.

The inclusion and discussion of CJEU fines as new own resources is meant to provide food for thought about the scope of potential alternative revenue sources of the future EU budget. This policy option which is often regrettably overlooked constitutes an additional potential – and arguably long overdue – resource capable of linking the fight against market failures to the European revenue side.

Summary of preliminary assessment for CJEU fines

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3.5 Conclusions from the preliminary assessment

The previous chapter has underlined that each policy option carries a particular added value to the debate on new green own resources. Each one has its strengths as well as its challenges. According to the preliminary assessment presented in the table below, a number of observations can be made.

First, while broad energy taxation promises the largest revenue and is therefore the forerunner candidate on the economic dimension in terms of sufficiency and stability, the other options do score better on social equity and partially on the environmental dimension.

Second, in terms of environmental impact carbon taxes seem the most promising as they would directly affect and correct the strongly needed price of carbon which would have major beneficial implications on a cross-sectoral basis. Yet, since only a limited number of member states has so far implemented national carbon taxes, political hurdles to overcome may be higher than for other policy options.

Third, road fuel taxes may not seem as ambitious as carbon taxation in terms of their environmental impact, but do score well on all dimensions. They may not generate the same revenue as energy taxes, but enough to substitute the entire current EU budget when added together. Depending on the design they can address crucial market distortions such as the petrol and diesel price gap and address the increasing GHG emissions of the road transport sector.

Fourth, including fines imposed by the Court of Justice of the EU might be less politically challenging than the other options. This pathway would also overcome the existing paradoxical situation that revenue which is among the most genuine is not directly made available to the European institutions. However, in terms of sufficiency, they are by far the weakest among the four options scrutinised, but they could still constitute a share in a package of several green own resources.
### Table 4: Summary of preliminary assessment

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4 Enlarging the inventory: innovative green own resource candidates

The previous section has made a strong case in favour of four selected potential EU green own resources. However, the inventory on prospective candidates is far from being exhausted. Discussing the future of EU revenue opens policy-windows for a broad range of new and innovative instruments.

The four assessed policy options show strong economic, social, environmental and political potential and are regarded as meaningful candidates to replace the existing revenue sources and/or increase the EU budget. Some of them have already been considered potential candidates by the European Commission before and can thus draw on the political attention needed to find the necessary support among policy-makers.

Innovative and thought-provoking ideas could, however, enlarge the debate on enabling the EU budget’s steering effects and spark the needed inspiration to rethink the EU budgetary system in terms of its potential to deliver on the EU’s broader social and ecologic objectives.

A comprehensive toolkit of innovative green own resources could therefore include the following options:

**Fossil fuel investment tax:** Such a tax could be implemented to drive forward the divestment of assets from the fossil fuel industry and pave the way for more sustainable investment structures. This way it can be ensured that public and private investments in the fossil fuel industry do take part in shouldering its external costs. At the same time, market signals would be corrected to shift investments towards low-carbon activities and energy production.

**Nuclear investment tax:** In a similar spirit a nuclear investment tax could target investment flows supporting nuclear power production, whose unpredictable societal effects pose a threat not only to public health and the environment but also public finances (for example in the context of transport, deconstruction and waste storage).

**Digital market transport tax:** The recent developments and the continuing growth potential of e-commerce are accompanied by concerns about hidden costs, such as those associated with the increased transport of goods, often not reflected in the consumer price. A tax that accounts for transport externalities (including road transport and shipping) could thus be discussed in the context of the establishment of a European digital market and its impact on the real economy.

**Antibiotics and fertiliser tax:** The rationale underlying these two instruments addresses the externalities of agriculture, a sector that is one of the biggest emitters of GHG emissions in the European Union and at the same time a traditionally central recipient for EU funding. Although the European public has become increasingly aware of the detrimental effects of antibiotics and fertilisers overuse in industrial and stock farming, common EU-wide policies targeting the protection of soil through sustainable fertilising and the moderate use of antibiotics remain weak and patchy.

**Green custom duty:** European environmental standards only apply to goods produced in the European Union. This can have two negative side effects: first, it provides domestic companies incentives to
consider shifting their production abroad to countries with laxer ecological requirements. Second, imported goods produced outside the EU under less stringent obligations enjoy a considerable price advantage vis-à-vis local products. One solution could be the introduction of a green custom duty on products entering the European Single Market which would offset their price advantage caused by lower environmental standards. Although small effects on the EU trade and international cooperation policy need to be taken into consideration, a duty similar to carbon border adjustments could ensure consistency between the internal EU environmental agenda and its role as global promoter of international trade.

These innovative instruments could prove valuable in complementing policy options (as previously mentioned) with a distinct steering effect. These include the kerosene tax, the financial transaction tax, and the common consolidated corporate tax rate.

The suitability of these instruments as EU own resources depends on the same economic, environmental, social and political criteria discussed in more detail in the main sections of this report. Although some innovative options may not perform as strongly as the chosen candidates in terms of their economic potential or social impact, they are still crucial in driving the debate on green alternative own resources forward and in demonstrating the diversity of the green own resources inventory.

5 The way ahead

This report is meant to open the debate on alternative and greener sources of EU revenue in the future. After providing a short overview of the current financing system of the Union and its deficiencies, a broad range of potential green candidates was presented while four options were scrutinised under a preliminary assessment in the last part of the study. A future in-depth study will examine a narrower choice of genuine green own resources.

According to the preliminary assessment, the four options analysed have different strengths and weaknesses. While energy taxes, carbon taxes and road fuel taxes all promise to provide sufficient future revenue for the entire EU budget or at least of replacing a range of GNI-based contributions, revenue by CJEU fines should rather be regarded as a correction of the current budgetary system and as part of a larger revenue reform package.

Obviously, the assessment presented in this study is far from exhaustive. The different options presented shall provide a general overview on what green own resources for the European Union could look like and which factors should play a key role in selecting potential candidates.

2016 is an important year for tabling alternative proposals for ambitious future EU own resources. This summer, the HGLOR will convene an interinstitutional conference on own resources including participation from all national governments to debate the future financing of the EU. By the end of the year, the group is expected to publish its final report.

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In this light, this report needs to be regarded as a point of departure rather than the end of a journey. Its main objective to provide a basis for discussion on green own resources has been delivered, but the wider discussion on green own resources should consider a broader range of questions:

- With regards to general reluctance of citizen support for (environmental) taxation, and the current Eurosceptic context in particular, how can the Greens effectively promote the introduction of green own resources?
- What are suitable ways to communicate the concept of green own resources convincingly to different target groups, including:
  - The Council and EU Member States, in particular MS finance ministers?
  - Other Members of the European Parliament?
  - Wider range of stakeholders, i.e. cities, local councillors, private sector (esp. SMEs)?
  - European citizens?
References


T&E (2016b). *NGO letter* to European Commission Vice President Šefčovič, Commissioners Bulc and Arias Cañete and to European Transport & Climate Ministers. Accessed 05.05.2016.


Legislative sources


Glossary

A

**Appropriations**
Term referring to budget funding. Appropriations come in two forms:

*Commitments*: Legal assurance to grant financial transfer if certain conditions are met.

*Payments*: Actual cash or bank transfers to beneficiaries.

B

**Backlog or Payment backlog**
Notion referring to outstanding payments at the end of the financial year which are carried over to the next year. There are two types of backlogs: ‘Normal’ and ‘abnormal’ backlogs. ‘Normal backlogs’ relate to outstanding payments which are considered unavoidable (such as those stemming from payment claims not paid because they were transmitted in the very last days of the year or those payment claims which are interrupted/suspended for certain beneficiaries). Backlogs are deemed ‘abnormal’ on the other hand when payments at year-end remained unpaid because authorised payment appropriations on the relevant budget line were exhausted.

**Budgetary authority**
Term referring to the European Parliament and the Council of the European Union which jointly form the EU’s primary legislative authority in overseeing and adopting the annual budget.

C

**Call rate**
Percentage used as a basis for calculating national contributions to the budget.

E

**Enhanced cooperation**
Refers to a procedure where a minimum of 9 EU countries are allowed to establish advanced integration or cooperation in an area within EU structures but without the other EU countries being involved under article 20 TEU.

**European Single Market or Internal Market**
Refers to the European Union’s internal market characterised by the abolition of internal borders and the protection and promotion of the free circulation of people, goods, services and capital, the so-called ‘Four Freedoms’.

G

**Gender Budgeting**
Term referring to the application of gender mainstreaming to the budgetary process. It means a gender-based assessment of budgets, incorporating a gender perspective at all levels of the
budgetary process and restructuring revenues and expenditures in order to promote gender equality”.

**GNI-based own resource**

Currently, the largest of the European Union’s own resources as defined in the ORD according to its share in total revenue accounting to 72.9%. It is based on de facto national contributions based on a uniform call rate which is applied on the member states’ gross national income (GNI) after corrections have been accounted for. The GNI-based own resource is also referred to as the ‘residual resource’ since it is used to finance the remainder of the EU revenue after all other revenue is calculated and added to the EU budget.

**Gross fixed capital formation**

Gross fixed capital formation is defined as the acquisition (including purchases of new or second-hand assets) and creation of assets by producers for their own use, minus disposals of produced fixed assets. It is usually deployed as an indicator for non-financial investment as it estimates which amount of generated added value in an economy is used to purchase fixed assets necessary for production.

**M**

**Multiannual Financial Framework (MFF)**

The Multiannual Financial Framework (MFF) ensures a mid-term outlook on financial programming and budgetary discipline for a period of at least five years with the current MFF covering a period of seven years, 2014-2020. It is adopted through a Council Regulation and defines overall spending ceilings for each of the years covered as well as financial specifications for each budgetary heading which cover the EU’s policy fields. The current MFF sets a maximum amount of EUR 960 billion for commitment appropriations and EUR 908 billion for payment appropriations and divides expenditure along six main categories or headings: Smart and Inclusive Growth, Sustainable Growth: Natural Resources, Security and citizenship, Global Europe, Administration and Compensations.

**O**

**Own-Resource Decision (ORD)**

Legislative act adopted under a special legislative procedure based on article 311 TFEU defining and establishing and defining a system of own resources for the European Union. ORDs are adopted unanimously in the Council with the European Parliament being consulted and enters into force after all EU member states have approved the decision in line with their “constitutional requirements”.

**P**

**Paris Agreement**

Refers to an international climate agreement negotiated under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC) and adopted on 12 December 2015 in Paris. The agreement sets out a peer review process aiming to mitigate greenhouse gas emissions and financially support global transitions towards low-carbon emissions and climate resilience.
RAL
Abbreviation for the French “Reste à liquider”. Notion referring to all outstanding commitments that remain unpaid at a given point in time.

Traditional own resource (TOR)
Currently, one of the European Union’s own resources as defined in the ORD accounting for 12.9% of total revenue in 2016. They are based on proceeds from customs duties, agricultural duties, and sugar and isoglucose imposed on economic operators and are usually perceived as the most genuine of all current own resources of the EU. Yet, their share has decreased significantly over time.

VAT-based own resource
Currently, one of the European Union’s own resources as defined in the ORD accounting for 13.1% of total revenue in 2016. They are de facto national contributions based on a statistical VAT base which is harmonised across member states. Due to its complex calculation and its non-genuine character, it has been proposed to remove the VAT-based resource.
## Annex I: Development of EU budget revenue 1970-2016

Table 5: Development of EU budget revenue 1970-2016 [in % share of total revenue]

<table>
<thead>
<tr>
<th>Year</th>
<th>TOR</th>
<th>VAT-based</th>
<th>GNI-based</th>
<th>Direct nat. contributions</th>
<th>UK correction</th>
<th>Surplus from previous year</th>
<th>Other revenue</th>
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**Source:**

- **For 1970-2008:**

- **For 2009-2014:**

- **For 2015-2016:**
Annex II: Evolution of backlogs 2007-2016

Figure 15: Evolution of backlog in EU Structural and Cohesion Funds [in EUR billion]

Note: Outstanding payment claims at year-end. ESF = European Social Fund, ERDF = European Regional Development Fund, CF = Cohesion Fund.

Annex III: Overview of member state’s record on limiting air pollutants

**Figure 16:** EU-27 member state progress in meeting National Emissions Ceiling Directive (NECD) targets

<table>
<thead>
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<th>Member State</th>
<th>NOx</th>
<th>NMVOCs</th>
<th>SO2</th>
<th>NH3</th>
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</table>

**Note:** ‘v’ indicates that the emission ceiling has been attained; ‘x’ indicates the ceiling has not been attained. Years 2010, 2011 and 2012: final data; year 2013: provisional data.

Annex IV: Public Opinion on environmental policy

Figure 17: Public opinion on different environmental policy options

## Annex V: Exceptions to the non-assignment rule

### Table 6: Exceptions to the non-assignment rule

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<tr>
<th>External assigned revenue</th>
<th>Internal assigned revenue</th>
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<td>• Financial contributions from member states to certain research programmes pursuant to the Council Regulation implementing the Decision on the system of the Communities’ own resources; the reason for this is because not all member states take part in the programmes concerned.</td>
<td>• Revenue from third parties in respect of goods, services or work supplied at their request.</td>
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<td>• Financial contributions from member states and third countries, including in both cases their public agencies, entities or natural persons, to certain external aid projects or programmes finances by the Union and managed by the Commission on their behalf.</td>
<td>• Proceeds from the sale of vehicles, equipment, installations, materials and scientific and technical apparatus which are being replaced or scrapped when the book value is fully depreciated.</td>
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<td>• Interest on deposits and the fines provided for in the Regulation on speeding up and clarifying the implementation of the excessive deficit procedure.</td>
<td>• Revenues arising from the repayment of amounts wrongly paid.</td>
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<td>• Revenue earmarked for a specific purpose, such as income from foundations, subsidies, gifts and bequests, including the earmarked revenue specific to each institution.</td>
<td>• Proceeds from the supply of goods, services and works for other departments within an institution, institutions or bodies, including refunds by other institutions or bodies of mission allowances paid on their behalf.</td>
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<td>• Financial contributions to Union activities from third countries or from non-Union bodies.</td>
<td>• Insurance payments received.</td>
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<td>• Revenue generated by the Research Fund for Coal and Steel.</td>
<td>• Revenue from payments connected with lettings.</td>
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<tr>
<td>• Revenue generated by the activities of the Joint Research Centre.</td>
<td>• Revenue from the sale of publications and films, including those on an electronic medium.</td>
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<tr>
<td>• Internal assigned revenue ancillary to any of the above.</td>
<td>• Repayments to financial instruments.</td>
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<td>• Revenue arising from reimbursement of taxes by third countries.</td>
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<td>• Revenue stemming from a basic act adopted laying down the basis for a Union programme unless otherwise provided (Article 21(4)).</td>
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97 Contributions from Third Countries are calculated by applying a ‘proportionality factor’ relating to the GDP ratio of the Union member states and that of the third country in question. Such contributions are not included in the budget, but appear in an Annex to the budget ‘for information’ only. Likewise can contributions by candidate countries be calculated and assigned to the budget while their ultimate contributions are defined on a case-by-case basis in the association councils.