



**EUROPEAN COMMISSION**  
DIRECTORATE GENERAL  
ECONOMIC AND FINANCIAL AFFAIRS

Ares(2020).  
Brussels,

**TAX WEDGE ON LABOUR:**  
**SHIFTING TAX BURDEN FROM LABOUR TO OTHER FORMS OF TAXATION**

---

Technical note for the Eurogroup<sup>1</sup>

---

<sup>1</sup> This is a technical background paper prepared by services of the Commission. It does not represent the Commission position and does not bind the Commission in any way.

## 1. Introduction

**Climate change is one of the most serious challenges facing our world today and it is expected to affect our economies and societies.** The economic consequences of climate change are affecting consumers, workers, businesses, public finances and financial markets alike. As a response to these challenges, the European Commission presented the European Green Deal<sup>2</sup> – a roadmap for making the EU's economy sustainable by 2050 by turning climate and environmental challenges into opportunities across all policy areas and making the transition just and inclusive for all. Moreover, to back up its commitment to becoming climate-neutral by 2050, the European Commission has presented the Sustainable Europe Investment Plan<sup>3</sup>, aiming at mobilising public investment and helping to unlock private funds through EU financial instruments.

**As set out by the European Green Deal, taxation can contribute to the transition towards a climate-neutral economy.** Carbon taxes and emissions trading systems (ETS) are widely considered the single most effective way for countries to reduce their greenhouse gas emissions.<sup>4</sup> Carbon pricing internalises the environmental costs of production and consumption, and stimulates clean technology and market innovation, which are needed to achieve an efficient transition to a climate-neutral economy. While ETS provide an efficient way of addressing carbon emissions in energy-intensive sectors, taxation and regulations have often been used efficiently in non-energy-intensive and household sectors.<sup>5</sup> Taxation also has the advantage of generating revenue which can be used to finance the additional investments of EUR 260 billion a year, which are needed to reach the 2030 climate and energy targets.<sup>6</sup> Additional tax revenue can also be used to finance labour tax reductions.

**The call to use taxation in the transition towards a climate-neutral economy puts the question of how to finance labour tax reductions into another perspective.** Following its commitment in 2015 to benchmark the tax wedge on labour<sup>7</sup>, the Eurogroup annually takes stock of the reductions of the tax burden on labour. While only a few Member States have the fiscal space to reduce the tax burden on labour without the need for offsetting measures, most Member States will have to either reduce expenditures or shift the tax burden to other taxes.<sup>8</sup> While the revenue potential of consumption and recurrent property taxes has often been used to finance reductions in the tax wedge on labour, only very few Member States used environmental taxes as an alternative financing source. As part of the transition towards a climate-neutral economy, this note makes the case for relying more on environmental taxation to finance labour tax reductions, as shifting to environmental taxes can offer a win-win situation. The note also discusses the advantages and drawbacks of environmental taxes and compares them with other revenue sources.

---

<sup>2</sup> European Commission communication (2019) "The European Green Deal", COM(2019) 640 final.

<sup>3</sup> European Commission Communication (2019) "Sustainable Europe Investment Plan - European Green Deal Investment Plan", COM(2020) 21 final.

<sup>4</sup> Also, regulatory measures (e.g. setting targets or technological standards) can be used to reduce environmentally harmful behaviour and counteract climate change. Which policy instrument is most suitable will depend on the specific situation and on country-specificities.

<sup>5</sup> Mirrlees, J., Adam S., Besley T., Blundell R., Bond S., Chote R., Gammie M., Johnson P., Myles, G. and J. Poterba (2011). *Tax by Design: The Mirrlees Review*, New York: Oxford University Press.

<sup>6</sup> The key targets for 2030 are: at least 40% cuts in greenhouse gas emissions (from 1990 levels), at least 32% share for renewable energy and at least 32.5% improvement in energy efficiency.

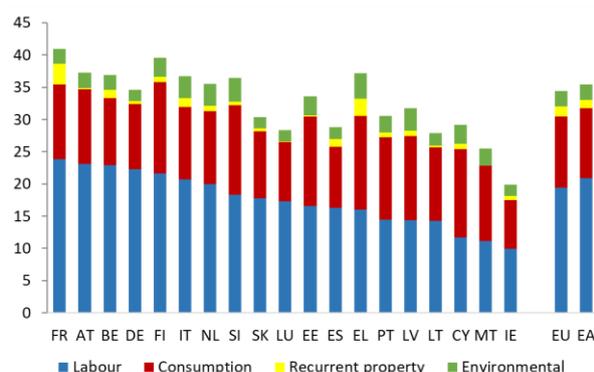
<sup>7</sup> The tax wedge is defined as the sum of personal income taxes and employee and employer social security contributions net of family allowances, expressed as a percentage of total labour costs (the sum of the gross wage and social security contributions paid by the employer).

<sup>8</sup> Also the 2020 euro area recommendation, as proposed by the Commission, calls for a tax shift away from labour.

## 2. Benchmarking the tax wedge on labour in the euro area – the state of play

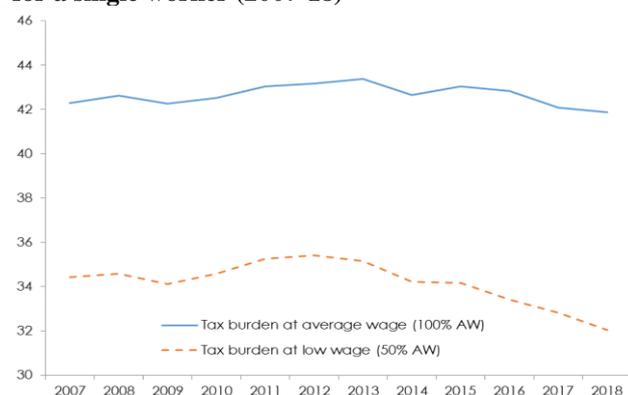
**The overall tax burden in the EU is above the OECD average and is still skewed towards labour.** For euro area Member States, the tax burden on labour stood on average at 20.9% of GDP in 2017 and is among the highest in the world. For most governments, taxes on (employed) labour (personal income tax, as well as employer and employee social security contributions) are the most important source of tax revenue, contributing nearly half of all revenues (Graph 1). A high tax burden on labour runs counter to the objective of boosting economic activity and increasing employment. Reducing personal income taxes or employee social security contributions has the potential to stimulate labour supply and create work incentives, in particular for low-income and second earners, who are especially responsive to changes in after-tax wages. Reducing employer social security contributions can contribute to support job creation and improve firms' cost-competitiveness. However, the level of labour taxation very much depends on national preferences and on the size of the social security system, implying that there is no optimal labour tax burden. What is of greater importance is the overall tax structure and the distribution of the tax burden over the different income groups.

**Graph 1: Taxes as % of GDP, 2017**



Source: European Commission services.

**Graph 2: Euro area average tax wedge on labour for a single worker (2007-18)**



Notes: Euro area averages are GDP-weighted.

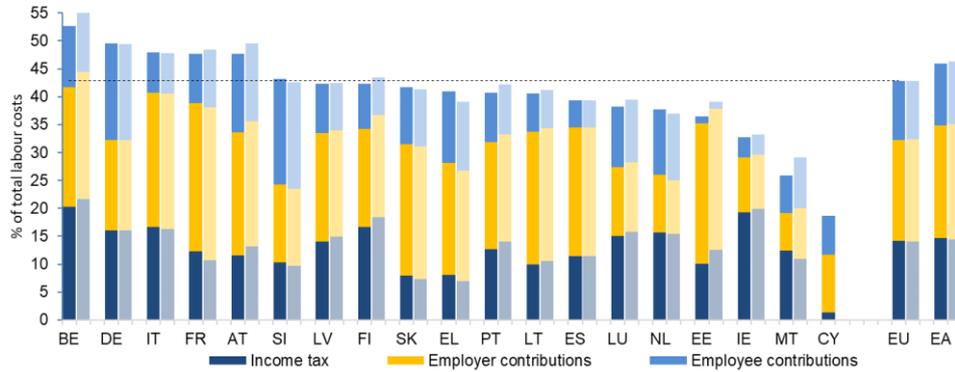
Source: European Commission Tax and Benefits Indicator database based on OECD data.

**Several Member States have undertaken reforms to reduce the tax burden on labour over past years.** In 2015, the Eurogroup agreed to benchmark euro area Member States' tax burden on labour<sup>9</sup>, relying on two indicators: the tax wedge on labour for a single worker at average wage and at low wage (50% of the average wage) respectively. As a result of implemented policy reforms, the euro area average tax burden on labour has since decreased in the euro area, in particular for low-income earners (Graph 2). However, differences between euro area Member States in terms of the overall tax burden on labour and its composition remain substantial (Graphs 3 and 4). In 2018, tax wedge reductions for average income earners were most significant in Estonia and Belgium. For low income earners, labour tax reductions were notably large in Estonia and Latvia, reducing the tax wedge by more than five percentage points.<sup>10</sup>

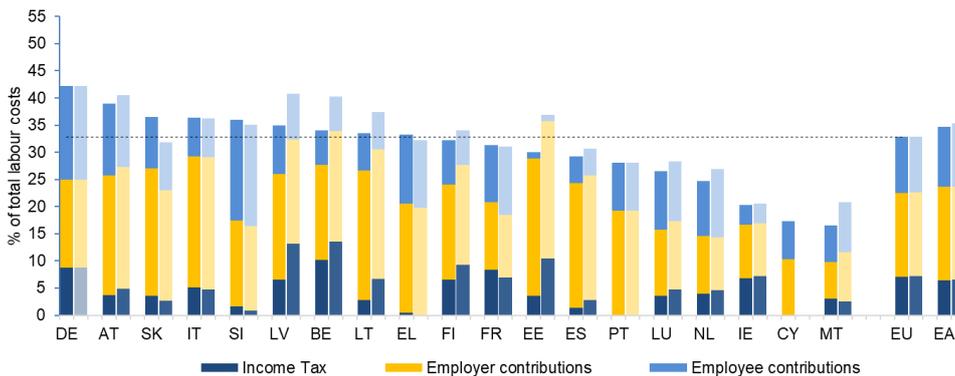
<sup>9</sup> <http://www.consilium.europa.eu/en/press/press-releases/2015/09/12-eurogroup-statement-structural-reform/>

<sup>10</sup> On the other hand, the tax wedge increased for low-income earners in Slovakia in 2018, which is mainly explained by the fact that the tax system is not indexed for wage increases.

**Graph 3 - The tax burden on labour for a single person at the average wage (2018-2015)**



**Graph 4 - The tax burden on labour for a single person at low wage (2018-2015)**



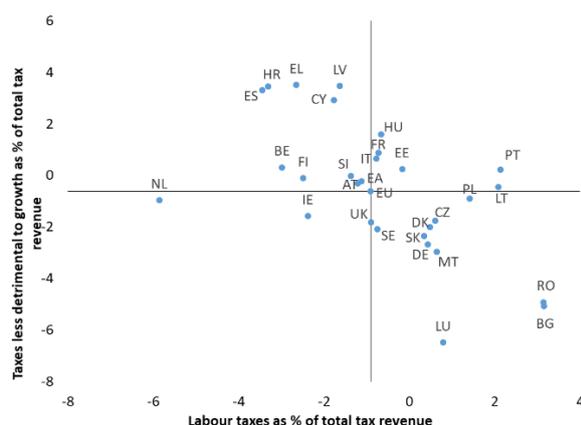
*Notes:* The line in the graphs represents the benchmark, i.e. the GDP-weighted EU average. The low wage indicator is 50% of the average wage. The indicators for 2018 reflect the reforms introduced in 2018, as an annual average based on monthly data. This means that, if a reform became effective early 2018, it will be more strongly reflected in the indicator. If a reform became effective only at the end of 2018, it does not show strongly yet and will only be fully reflected in the 2019 indicator. *Source:* European Commission Tax and Benefit Indicator database based on OECD data ([http://europa.eu/economy\\_finance/db\\_indicators/tab/](http://europa.eu/economy_finance/db_indicators/tab/))

### 3. Shifting from labour to environmental taxes

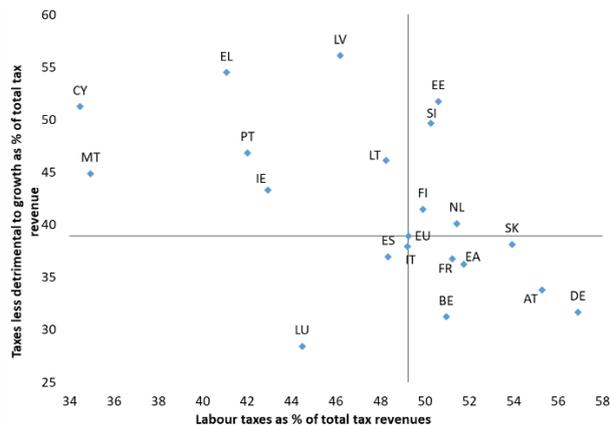
**Shifting the burden to other tax bases is the most common way of financing labour tax reductions.** Given the overall limited fiscal space, only few Member States have the opportunity to reduce the tax burden on labour without the need to offset revenue losses. Over past years, some Member States financed labour tax reductions by cutting public expenditure. However, most of them chose to make the overall tax system more growth-friendly and to increase other taxes that are less growth-distortive. In particular, consumption taxes, recurrent property taxes and environmental taxes are considered as good candidates in this respect.<sup>11</sup> Indeed, Member States' experiences show that reductions in labour taxation were often compensated by shifts to these taxes (Graph 5). However, some Member States facing a relatively high tax burden on labour, might still have some tax shift potential (Graph 6).

<sup>11</sup> OECD (2010), 'Tax Policy Reform and Economic Growth', <http://dx.doi.org/10.1787/9789264091085-en>.

**Graph 5 – Variation in labour taxes vs variation in taxes less detrimental to growth, 2012-17**



**Graph 6 – Labour taxes vs taxes less detrimental to growth as % of total tax revenue, 2017**



Note: Graphs are not reflecting recent tax reforms (2018 and later).  
Source: Commission services.

**Also further improving tax governance helps increasing revenue and can serve as an alternative financing source.** A considerable amount of revenue could be raised by improving collection of existing taxes and by introducing measures to improve tax compliance. While capital and labour taxes entail relatively important compliance costs in many Member States, recurrent property, consumption and environmental taxes are often easier to collect. Moreover, capital taxes are more often subject to tax evasion, than other taxes. In general, improving tax governance should be part of any tax reform aiming at adjusting the tax structure. See Table 1 for an overview of the properties of the different types of taxes.

**Table 1 – Features of different tax categories**

Tax category	Less detrimental to growth	Distributional impact	Tax governance
Corporate taxes	-	+	-
Capital income taxes	-	+	-
Labour taxes	-	+	+/-
Inheritance and gift taxes	+	+	-
Recurrent property taxes	+	+/-	+
Consumption taxes	+	-	+
Environmental taxes	+	-	+

Source: European Commission, Tax policies in the European Union, 2019 Survey.

**While consumption taxes have a high revenue potential, they may be regressive.** Given the size of their potential tax base, consumption taxes are often preferred over other taxes as a revenue-raising instrument. However, higher consumption taxes are often associated with lower tax progressivity.<sup>12</sup> While reduced VAT rates are sometimes introduced to support low-income households, they were found to be a poorly targeted and costly way of achieving this aim.<sup>13</sup> Moreover, a rise in consumption taxes could increase prices and feed into wage increases that, at least partly, counteract the reduction in labour costs resulting from the tax shift (referred to as the ‘second round effect’).<sup>14</sup> If wages do not react quickly, a shift from labour to consumption taxes could strengthen competitiveness (referred to

<sup>12</sup> N. Pestel and E. Sommer (2015). Shifting Taxes from Labor to Consumption: More Employment and more Inequality, ZEW Discussion Paper No. 15-042.

<sup>13</sup> OECD (2014, updated 2018) "The distributional effects of consumption taxes in OECD countries." (OECD Tax Policy Studies No 22/2015), <http://www.oecd.org/ctp/the-distributional-effects-of-consumption-taxes-in-oecd-countries-9789264224520-en.htm>.

<sup>14</sup> Accounting for the second-round feedback effects of tax reforms on the tax base is important from a fiscal sustainability point of view because these effects can make the tax reduction partially self-financing. (QREA 2018 - volume 17 no 2).

as "internal devaluation"). Given this, one should take into account potential spill over effects in the euro area when considering shifting the tax burden from labour to consumption.

**Recurrent taxes on immovable property provide a stable tax base, but face some implementation difficulties (e.g. property valuation).** Since property ownership is generally easy to establish and identify, taxing immovable property offers a stable tax base that could serve as a source of financing a tax shift away from labour. Moreover, the fixed geographic location of immovable property makes taxation difficult to evade. In Member States where property values were not updated for many years, increasing revenue could be done by bringing the tax base in line with market values instead of increasing tax rates. However, failure to regularly update property values erodes the tax base over time, while giving further support to rising property prices and creating potentially inequitable effects. Postponing the revision of property values may reduce the political feasibility of a reform, due to distributional concerns. Due attention should therefore be given to the timeframe for increasing recurrent property taxes, given the long-term nature of housing investment, the significant lock-in effects and the potential impact on housing market dynamics.

**While environmental taxes help achieve environmental objectives, they may have a negative distributional impact.** If well-designed, environmental taxes can play an important role in furthering a circular economy, changing behaviour and help reducing negative externalities, which are harmful to sustainable long-term growth. Moreover, macro-economic modelling shows that environmental and economic gains can simultaneously be achieved ('double dividend') by shifting from labour taxes to environmental taxes.<sup>15</sup> Environmental taxes also support intergenerational fairness, as they help meeting today's environmental challenges, without unduly placing a burden on future generations. However, in the short run, they bear the risk to increase prices and as such to disproportionately affect people with low income.

**The potentially regressive nature of environmental taxes is a challenge to increasing their use, which calls for considering compensatory measures.** Specific concerns with respect to the competitiveness of energy or resource intensive sectors as well as the administrative and enforcement costs linked to their implementation have in the past been obstacles to a more extensive use of carbon pricing. The potentially regressive character of environmental taxes is also seen as a barrier to increasing their use. Environmental taxes may affect the cost of basic goods, like heating, electricity and transport. Since low-income households spend a larger share of their income on these goods than high-income earners, an increased level of taxation of these goods may – if happening in isolation – have regressive distributional effects. This disadvantage can be addressed by bundling environmental tax increases with accompanying measures, like financial support to those most affected in the form of targeted benefits or subsidies to adopt more energy-efficient technology. Moreover, in the context of a tax shift, labour tax reductions could take the form of cuts in employees' social security contributions or income taxes for specific low-income earners, to mitigate potential regressive effects and to overcome the resistance to environmental taxes. Moreover, making environmental tax increases part of a comprehensive (tax) reform package helps increasing their political acceptance.<sup>16</sup>

**Moreover, environmental taxes remain relatively low in many euro area countries, leaving substantial scope to using them more extensively as a source of financing labour tax reductions.**

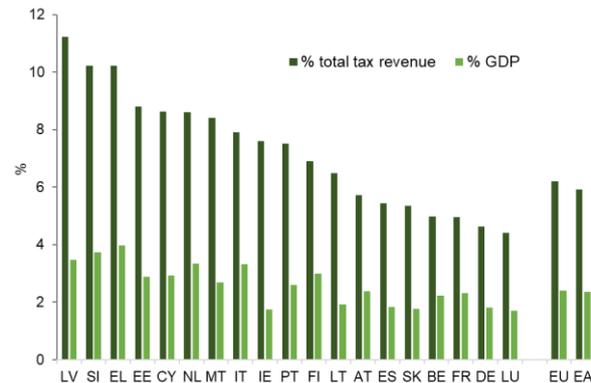
---

<sup>15</sup> See, for example, Freire-González, J. (2018). Environmental taxation and the double dividend hypothesis in CGE modelling literature: A critical review. *Journal of Policy Modeling*, 40 (1).

<sup>16</sup> For a further discussion of enhancing political acceptability see Klenert, D., Mattauch, L., Combet, E., Edenhofer, O., Hepburn, C, Rafaty, R. and N. Stern (2018), Making carbon pricing work for citizens, *Nature climate change*, vol 8.

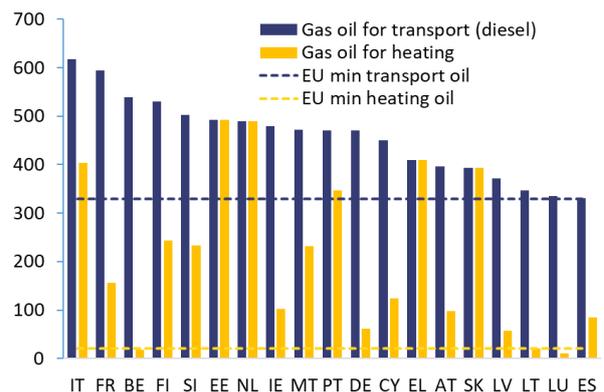
Only a limited number of countries will reach the 2020 target to collect 10% of total tax revenues from environmental taxes, as called for by the EU Flagship Initiative for a Resource-Efficient Europe (Graph 7).<sup>17</sup> Moreover, current relative tax rates on energy products do not necessarily give the right signal in terms of carbon emissions and energy-efficiency (Graph 8). While reduced pollution will - in the long run - result in declining government revenues from environmental taxes, they can be designed to continue generating tax revenue. Hence, the environmental sustainability challenge creates a window of opportunity to use environmental taxes more.

**Graph 7 – Revenue from environmental taxes as a percentage of total tax revenues and of GDP (2017)**



Note: Energy taxes were disentangled in “Transport-related energy taxes” and “Non-transport-related energy taxes”.  
Source: European Commission, Taxation Trends in the European Union, 2019 edition.

**Graph 8 – Marginal tax rates on gas oil used for private transport and heating, 2018 (EUR/1000 l)**



Note: Marginal tax rates are calculated on the basis of excise duty rates and carbon taxes but excluding VAT, taking into account specific features of tax system as well.  
Source: Commission services.

**Finally, also phasing out environmentally-harmful subsidies contributes to raising revenues, while serving environmental policy objectives.** Tax expenditures designed to benefit specific income groups or sectors can sometimes have a detrimental effect on the environment and can run counter to energy, climate and environmental objectives. Environmentally-harmful tax subsidies affect the resource allocation by favouring more polluting activities and slow down the shift to sustainable patterns of production and consumption. While the EU committed to phasing out environmentally-harmful subsidies<sup>18</sup> and in particular fossil fuel subsidies<sup>19</sup>, they are still applied in many Member States. Phasing-out these subsidies would free up public funding, which could be used as an alternative source of financing.

### Questions for discussion:

1. What are the difficulties you encountered (or expect to encounter) when designing and financing a labour tax reduction?
2. Do you plan to implement a shift from labour to environmental taxes in the near future? What, in your view, are the best practices for this? What are the potential pitfalls?

<sup>17</sup> EU Flagship Initiative for a Resource-Efficient Europe (2012) ([http://ec.europa.eu/resource-efficient-europe/pdf/resource\\_efficient\\_europe\\_en.pdf](http://ec.europa.eu/resource-efficient-europe/pdf/resource_efficient_europe_en.pdf))

<sup>18</sup> European Commission (2011) Roadmap to a Resource Efficient Europe. Brussels: European Commission. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011DC0571&from=EN>

<sup>19</sup> The EU has made international commitments to remove inefficient fossil fuel subsidies, under the G7 and G20 and in the Paris Agreement.