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EEAC WORKING GROUP ON SUSTAINABLE DEVELOPMENT (WGSD)

UNDER THE AUSPICES OF THE NFFT

ECONOMIC INSTRUMENTS TO ENHANCE SUSTAINABLE DEVELOPMENT

EEAC

NFFT
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I. INTRODUCTION

a. One hundred years ago, Arthur Cecil Pigou, an English professor of economics wrote a massive monograph, in which he presented the most important aspects of economics. His book, The Economics of Welfare, that is seen as the groundwork for welfare economics, included a part on external economic impacts, so-called externalities, in which environmental pollution was discussed in a few chapters. Pigou says that the use of our natural resources is often an externality and, as such, causes a loss in social welfare, however, it may be offset by an adequate amount of tax imposed by the government.

b. The idea of pricing the use of natural resources has by now become one of the axioms of economics; the details of this proposition have been addressed in thousands of articles in scientific journals, is taught in basic economics and management courses and its real, effective use has been urged by numerous Nobel prize winning and leading scientists (Mankiw, 2008; EAERE, 2019). Its use has also been regularly and consistently demanded by the OECD ever since the 1980s.

c. However, the pricing of the use of natural resources and the emission of pollutants has failed to be commonly adopted in policy-making. Green tax reform has often been mentioned, but has never actually been used. Furthermore, the rate of the use of environmental taxes in the EU27 countries is 5.99% compared to the total revenues from environmental and all other taxes. It even has slightly declined since 2010 (from 6.24%). However, as the GDP has been steadily growing since 2010, the tax burden has also been increased, the nominal rate of revenues from environmental taxes has also been rising.

   As the tax burden in the EU27 countries is higher (40.2% in 2018) than in other developed countries (the OECD average is 34.3%), taxation is a more important policy incentive in Europe than in other countries across the world. This is the reason why it would be crucial to support the sustainable transition with the help of fiscal instruments as well.

   The internal structure of the environmental taxes is also imbalanced. Whereas, energy (or carbon) taxes are most often used (78%), the change in land use, the use of natural

resources as inputs, environmental pollution and waste generation are hardly taxed. As 67% of all energy taxes comes from transportation related fuel taxes, more than half (52%) of the total revenues from environmental taxes is basically generated from taxing a single type of pollution. (DG-TAXUD, 2020)

The tax burden imposed on natural resource use (GDP 2.4%) is far below the degree of welfare losses caused by environmental burdens (adverse social impacts of air pollution only are higher than the taxes – WHO and OECD, 2015) and the composition of environmental taxes fails to be aligned with the pattern of the loss of ecosystem services and the losses caused by environmental pollution.

d. Until now, no adequate policy answer is proposed. Some studies show that only 5 of the 25 analysed EU countries moved towards a more sustainable taxation system between 2004 and 2016. "*Italy, Greece, Slovenia, Estonia and Latvia have been the only counties to increase the role of taxation rates and regulations and to reduce the relative contribution that economic factors have played in the generation of the revenue collected. For all the other Member States, economic growth and structural change effect have been the main drivers of environmental tax revenue variations."* (Andreoni, 2019)

e. The hypothesis established with regard to the subject of thispaper is that, while the necessary sustainability shift is not entirely prevented, it is significantly restricted by the lack of appropriate price signals associated with the use of natural resources. therefore the presumption is that the objectives related to natural resources within the comprehensive goals of sustainable development cannot be effectively and efficiently achieved unless the economic instruments of environmental protection are effectively incorporated into environmental and economic policies.

f. The following five member organisations were involved in the preparation of the explanatory paper:

FRDO-CFDD – Federal Council for Sustainable Development, Belgium

Kestävyyspaneeli – Finnish Expert Panel for Sustainable Development

NESC – National Economic and Social Council, Ireland

NFFT – Hungarian Council for Sustainable Development

RNE – German Council for Sustainable Development

The process has been coordinated by the NFFT. The draft version of the paper was discussed by the WGSD at a meeting on January 26th 2021. It is important to note that the data for this position paper is based on inputs, which were typically collected or generated before or during the first phase of the COVID-19 pandemic, therefore the inputs doesn't or only partly include any green actions taken by some governments or the European Commission in response to the economic impacts of the pandemic.

II. THE SUSTAINABLE DEVELOPMENT GOALS IN THE EUROPEAN UNION: PROGRESS MADE?!

a. For the past decades, the importance of the sustainability transition has been constantly on the agenda of the European Union and its member states. Both at EU and national level, the promotion of the aspects, principles of sustainable development has been integrated into a variety of policy documents, strategies, constitutions and laws and regulations.

FINLAND

The current government programme of Finland takes sustainable development as a cross-cutting and comprehensive starting point. Therefore, at least on a rhetorical level, the whole governmental target-setting is based on the idea of sustainable development.

IRELAND

Sustainability is at the heart of this long term planning and the National Planning Framework seeks to ensure that the decisions we take today, meet our own needs without compromising the ability of future generations to meet their needs.
There is significant alignment between the UN SDGs and the National Planning Framework's National Strategic Outcomes (NSOs) in areas such as climate action, clean energy, sustainable cities and communities, economic growth, reduced inequalities and innovation and infrastructure, as well as education and health.
As this is a long-term plan it will take some time before it will be possible to evaluate whether the desired outcomes are being achieved. The first review is due to commence shortly and will focus more on strategic and process evaluation with output and outcome evaluation become more useful as time goes on.

HUNGARY

In Hungary, the concept of sustainable development and the preservation of the natural heritage for future generations has been a constitutional requirement since 2011.

b. However, Europe's real sustainability performance is far below the level required by political declarations and laws and regulations. The 2020 report based on the methodology of the SDSN and IEEP (SDSN & IEEP, 2020) shows that the European Union will be able to achieve the sustainable development goals (SDGs) defined in the UN's 2030 Agenda only up to 70,7%. The performance of certain EU member states in this area varies between 55,8% and 81,1%. As a clear trend, the SDGs in the field of human, social and economic goals will almost certainly or very probably be achieved overall, however, the goals on natural resources (SDG 12, 13, 14, 15) are very far from being met.

c. In the past 50 years, numerous scientific studies, policy reports and international conferences warned about the degradation of Earth's ecological system and the depletion of our natural resources. A report by the IPBES published in May 2019 providing the first global scale assessment offers a comprehensive and detailed insight into the horrific consequences of the massive human-induced changes on the environment and nature. In the meantime, the IPCC has documented the process of the climate change in several consecutive reports. (IPBES, 2019; IPCC, 2014; IRP, 2019; OECD, 2020) These in combination indicate that if we continue to live by the same socio-economic rules, the degradation of the ecosystems, the extinction of animal and plant species and the resulting loss of a prominent part of the ecosystem services will lead to severe welfare crises, potentially in the foreseeable future.

d. Europe, taking into account activities carried out on the continent and the use of resources available in other parts of the world in Europe, continues to use the largest amount of natural resources and contribute to environmental degradation to the highest extent. The EEA SOER 2020 report says that the probability of achieving our environmental goals by 2030 is extremely low based on the current trends in environmental policy. The EEA's projections indicate that only two of the EU's 35 environmental policy objectives/targets are expected to be met while we are actually moving further away from our goals in 11 areas. (EEA, 2019)

e. Overall, the European Union and its member states are challenged by an enormous conflict: the void between the declared level of environmental sustainability objectives and the achievement of these objectives and the degree of their fulfilment. This situation may raise a number of questions: Were the objectives truthfully defined? Is the necessary level of understanding and agreement available between those responsible for implementation? Was the technology and infrastructure available to support the reduction of our environmental damage? And the list goes on... This position paper wishes to study one special potential reason for the above conflict and looks at whether the environmental and economic rules promoted the achievement of the objectives. If they did not, what can we do in order to reach our desired goals by 2030?

III INFORMATION, NATRUAL RESOURCE PRICING AND TAXES

3.1. ADVANTAGES OF INFORMATION, NATURAL REROUSCE PRICING AND GREEN TAXES

3.1.1. Information

a. Each day, households, businesses and community institutions make a vast number of decisions and choose between a vast number of alternatives. The success of a decision ultimately depends on whether the alternatives were fully compared, and whether all the necessary information was available to make that comparison. The ability of market economies to convert information related to the use of resources into price signals significantly improves our information position' as the information presented as a price signal can be quickly processed and aggregated.
b. If the properties of the various factors necessary to deliver products and services (their quantity, quality, scarcity, replaceability, etc.) are presented as different price signals, the efficiency of the use of such factors will be similarly different as a consequence. While capital and labour are factors that are easy to assess by way of price signals in market economies, information about the environment and nature, cannot be spontaneously or automatically converted into price signals. For this reason, market economies are generally (regardless of the imperfections every system has) quite good at the management of capital and human resources and are usually bad at the management of natural resources.

c. If market players are informed about the scarcity of natural inputs through prices, they will be encouraged to use technologies and solutions promoting improved natural resource productivity. The information about natural resources can also be converted into price signals using the right instruments and tools. The use of green fiscal instruments undoubtedly enhances the utilisation of more resource efficient solutions generated. . Böhmelt, Vaziri and Ward (2018) found evidence that higher levels of Green Tax Revenue per Capita improve the environmental input efficiency, based on changes in CO_2 emissions; the statistical interrelation is significant.

3.1.2. Prices and green taxes

d. If the use of natural resources has a price, the first dividend will be an optimal level of natural resource use and of environmental pollution and environmental damage will be adequately reduced. The provision of price signals related to the use of the environment may have other societal dividends as well. For example, the implementation of green tax reform allows for the revenues of environmental taxes to be used to reduce the rate of other taxes potentially distorting the market, which could induce national income growth – second dividend. As previously mentioned, environmental controls can also contribute to innovation and technology advancement – third dividend, which in turn can be the key to long term sustained growth.

e. The integration of environmental price signals into the economy, including by imposing environmental taxes will not result in a decrease in the GDP per capita. In other words, it does not prevent socio-economic development if these environmental controls are efficiently applied and the revenues from environmental taxes are properly used. The latest scientific studies (for example Fan et al., 2019) *confirm the view in the literature that imposing environmental tax plays an active part in green development.*

f. In certain cases, green development strategies – with the pricing of environmental uses at its heart – can even stimulate higher economic growth. The growth report of the Hungarian National Bank (Hungary's central bank) published in December 2019 says the following about Hungary: "*In the green growth scenario, environmentally sustainable economic growth may be achieved, which does not necessitate a drastic restraint of economic growth at a later stage. Through to 2050, at the global level annual average economic growth of 4 per cent may be forecast under such scenario, which is higher than the growth rates of 2.5 to 3 per cent projected in the alternative scenario presenting the*

continuation of current trends and is higher than the 30-year average (GDP growth of around 3 per cent)." (MNB, 2019)

3.2. PREREQUESITS

g. An ex ante assessment of Karydas and Zhang (2019) about the Swiss carbon tax had similar findings, stating that higher levels of energy taxes will lead to higher levels of economic growth. This requires however that there is mobile labour between manufacturing and R&D activities, that the introduction of green taxes does not raise the general level of taxation and it is also recommended that the level of capital tax be reduced by the revenues from environmental taxes. Another essential condition is that the intervention isbased on a thorough ex ante assessment: only carefully designed and implemented green taxes will stimulate innovation, which in turn can improve economic growth (Karydas and Zhang, 2019).

   "[A] tightening in environmental policies has a positive short-term effect on industry productivity growth in the most technologically advanced country-industry pairs. This positive effect diminishes with the distance to the global technology frontier and vanishes completely for the least productive ones. This finding is only partially reflected in the results at the firm level: only one-fifth of the firms are able to reap productivity gains after a tightening of environmental regulation. About half of the firms, the least productive ones, face a negative effect on productivity growth in the short run. This negative effect, for less technologically advanced firms, is lost at the industry level due to aggregation. Moreover, empirical results across the two levels of analysis yield some support for the narrow version of the Porter Hypothesis: market-based environmental policies are found to be more productivity-friendly than non-market instruments." (Albrizio, Kozluk and Zipperer, 2017)

h. It is also important to mention that a green tax reform requires a very careful design, because of some possible adverse effects on income distribution, on international competitiveness of businesses, and on tax income elasticity (and the government revenue).

BELGIUM	To tackle these adverse effects, the FRDO-CFDD (Belgian SD Council) elaborated a few criteria related to the introduction of green taxes in an 2009 opinion paper: "If the proposed environmental taxes hit the less well-off more heavily ("regressive" taxes), we combine them with compensatory measures, either within the instrument itself (e.g. exemption for particular categories or social modulation of tax rates) or through other instruments." see in FCSD opinion 2009: https://www.frdo-cfdd.be/en/publications/advices/opinion-greening-taxation-framework-sustainable-development

3.3. To conclude

i. The findings of scientific research studies on environmental fiscal instruments, environmental taxes and the green tax reform clearly indicate that the fiscal environmental policy instruments supporting the sustainability shift efficiently help protect natural resources and ecosystem services and reduce environmental pollution while these instruments, if correctly designed, may also help promote the further growth of the national income and competitiveness through for example innovation.

"Environmental taxes and green tax reforms are increasingly seen as powerful tools for promoting a transition to sustainable economies. Indeed, environmental taxes are now commonly known to constitute a cost-effective corrective approach contributing to the development and use of clean technologies. Environmental taxes can actually be applied to most environmental problems—climate change mitigation being a clear candidate—as part of a wider green tax reform with distributional and/or revenue objectives." (Labeaga and Labandeira, 2020)

III. THE STATE OF AND PROBLEMS WITH THE FISCAL INSTRUMENTS OF ENVIRONMENTAL POLICY

4.1. SUBSIDIES

a. At present, subsidies are the dominant fiscal instruments of environmental policy (or sustainable development policy related to natural resources). Governments launch dedicated sustainability projects and provide the necessary funding from tax revenues.

GERMANY

2018 to 2019: increase of 3.8 billion euros, based on increases in climate-friendly measures of the federal government such as the Energy Efficiency Fund, the further development of electric mobility and the subsidy for the construction of charging infrastructure for electric vehicles, as well as the introduction of new financial aid such as the reduction of track prices in rail freight transport, hardware retrofitting for delivery vehicles and the construction child allowance.

2019 - 2020 increase by 3.9 billion euros compared to 2019 is based on the decisions of the Federal Government to meet the climate targets for 2030 within the framework of the Energy and Climate Fund.

(Source: Federal subsidy report 2017-2020, https://www.bundesfinanzministerium.de/Content/DE/Downloads/Broschueren_Bestellservice/2020-03-01-Subventionsbericht.pdf?__blob=publicationFile&v=12)

IRELAND

Using a very conservative definition, the Department of Public Expenditure & Reform has estimated that €2,030,142,000 will be spent directly by the Exchequer in 2020 on climate-related spending programmes. The methodology for calculating this sum is detailed in the following publication: https://igees.gov.ie/wp-content/uploads/2020/01/The-Use-of-Carbon-Tax-Funds-2020.pdf

The Central Statistics Office estimates that €1.1 billion was paid in environmental subsidies and similar transfers in 2018, a 20% increase on 2017. The full details from this report are available here: https://www.cso.ie/en/releasesandpublications/er/esst/environmentalsubsidiesandsimilartransfers2018/

While subsidies play a key role in the introduction of some new, high-risk technologies and solutions, if they become the dominant instrument of environmental fiscal solutions, such subsidies in the long run have an adverse impact on the success of the sustainability transition. In case of a certain type of environmental pollution, taxing the polluters, instead of providing subsidies to non-polluters helps reaching an optimal use of the environment at a lower cost on societal level; ergo: the widespread use of subsidies is not efficient. Furthermore, while an environmental tax reaches, informs and stimulates all the emitters of the given pollution (or all the users of the given natural input), subsidies reach, inform and stimulate only the participants of a specific project; ergo: subsidies are selective. Additionally, if a government tends to give privileges to certain market players over other market players, this is easier to do with subsidies than with taxes; subsidies are more sensitive to rent seeking. As environmental taxes are positioned on the revenue side of the budget, and subsidies on the expenditure side,

subsidised environmental programmes are more vulnerable in times of fiscal crises, while environmental tax revenues become even more important in such crises; ergo: subsidies are vulnerable in times of budgetary austerity.

4.2. The problem of imbalance

b. Where subsidies are combined with the pricing of the use of the environment and collection of green taxes, their use is very imbalanced. While the most common green taxes include taxes related to energy use and carbon emission, the other two anthropogenic factors exploiting natural resources – material throughput (direct exploitations, pollution and waste) and land use change – are rarely subject to any green taxes. This is reflected in the data tables of Eurostat related to taxes and is confirmed by the country questionnaires generated specifically for the present study.

BELGIUM	Different types exist; the most important are tax rates on fuels for transport (diesel and petrol) and on fuels and gas for household warming. There is also a system of road pricing for truck transport.

GERMANY	Trade in emission certificates, taxes (e.g. energy taxation by customs such as a GHG quota for the oil industry which is incentivised for placing biofuels on the market) *(Sources: Federal subsidy report 2017-2020, https://www.bundesfinanzministerium.de/Content/DE/Downloads/Broschueren_Bestellservice/2020-03-01-Subventionsbericht.pdf?__blob=publicationFile&v=12 ; Departmental Report Federal Ministry of Finance 2019, https://www.bundesfinanzministerium.de/Content/DE/Downloads/Broschueren_Bestellservice/2019-05-28-bmf-ressortbericht-nachhaltigkeit-2019.html)*

IRELAND	Carbon Tax was introduced in 2009 and applies to transport fuels (excluding jet fuel used for commercial aviation), natural gas, solid fuels, kerosene used as a non-propellant, liquid petroleum gas, fuel oil, substitute fuel and marked gas oil on the basis of carbon intensity of emissions. A trajectory of annual increases was announced in October 2020 sending a long-term price signal to industry and consumers to encourage investment in green/alternative energy sources. Further detail available at https://www.revenue.ie/en/companies-and-charities/excise-and-licences/excise-duty-rates/mineral-oil-tax.aspx https://www.revenue.ie/en/companies-and-charities/excise-and-licences/energy-taxes/solid-fuel-carbon-tax/index.aspx https://www.revenue.ie/en/companies-and-charities/excise-and-licences/energy-taxes/natural-gas-carbon-tax/index.aspx http://www.budget.gov.ie/Budgets/2021/Documents/Budget/Budget%202021_budget%20speech_DFinance.pdf Vehicle Registration Tax and Motor Tax Regimes based on CO_2 emissions to encourage uptake of less polluting vehicles across the national fleet. A NO_X surcharge also applies to VRT since 2020 to disincentive the uptake of highly pollutant cars. Broad suite of measures in place to encourage uptake of electric vehicles including VRT relief, BIK exemption on vehicles up to maximum purchase price €50,000, generous purchase grants for personal purchase, accelerated capital allowance grants and reduced toll fees.
BELGIUM	There is no overall system or approach in Belgium to foster SD. On the one hand, different taxes exist: energy taxes, transport taxes, regional environmental levies (including resource taxes) and federal product taxes, on the other hand subsidy mechanisms have been put in place for companies and citizens (in the regions and on federal level) to foster the transition to low-carbon economy, energy savings and renewable energy

c. It is even worse when the partial and inefficient use of fiscal instruments to support the sustainability transition is overcompensated by the expenses, subsidies of fiscal systems promoting unsustainability. Environmentally harmful subsidies are significant in EU countries and they tend to typically exceed public expenditure on sustainable development goals and the protection of natural resources.

BELGIUM	The Belgian governments do not publish an inventory of environmentally harmful subsidies nor of fossil fuel subsidies. In a study by Climact (see https://wwf.be/assets/IMAGES-2/CAMPAGNES/ELECTIONS2019/FF-report/WWF-Climate-FF-report-final.pdf) some estimates of the environmental harmful subsidies in Belgium of different research institutions are published: they are situated in a range of 2 to 4 billion euro annually, according to the calculation method used.
GERMANY	2012: 56 billion euros (Source: Federal Environment Agency, https://www.umweltbundesamt.de/themen/wirtschaft-konsum/wirtschaft-umwelt/umweltschaedliche-subventionen#direkte-und-indirekte-subventionen)
FINLAND	"Environmentally harmful subsidies are being reviewed in the 2019 State budget proposal, in which their total sum has been estimated to be around EUR 3.5 billion. Environmentally harmful subsidies are primarily granted to three sectors: the energy sector, the transport sector and the agricultural sector. Out of these, the transport sector receives the largest amount of subsidies totalling 1.4 billion euros. However, the subsidy amounts to these sectors are close to one another. Both the energy and agricultural sectors receive just over 1 billion euros in subsidies. The largest single environmentally harmful subsidy in the 2019 budget proposal consists of a lower electricity tax rate for industry and greenhouse gases. The total sum of this subsidy has been estimated at approximately EUR 600 million. In the transport sector, the subsidy amounts for the lower tax rate for diesel fuel, adjusted by the vehicle power tax, the reduction in commuting expenses and the lower tax rate for light fuel used in machinery are all close to EUR 400 million. In the agricultural sector, the largest individual support consists of a natural constraint payment that compensates for the effects of differences in relationships with nature. Its share is approx. EUR 548 million." UPDATE: According the 2020 state budget proposal, the amount of identified environmentally harmful subsidies is EUR 3.6 billion.

4.3. A solution?

d. As a positive change in fiscal policy, a green funding option, green bonds were introduced in public borrowing. The government receiving the funds agrees to spend these funds exclusively on designated goals that are related to sustainable development- or environmental goals.

IRELAND	The National Treasury Management Agency (NTMA) on behalf of Ireland issued €3 billion of a Sovereign Green Bond in October 2018 and then tapped the bond again in October 2019 for a further €2 billion. The first ISGB allocation report was published in June 2019 and the first combined impact and allocation report is due to be published in summer 2020.

HUNGARY	Green bond issue in 2020

4.4. TO CONCLUDE

e. The use of the fiscal instruments of environmental sustainability is challenged by a number of problems that adversely affect one another, which will evidently lead to a void between the sustainability objectives and the declared ambitions and their achievement.

   i. While the importance of fiscal instruments of environmental sustainability is limited among the environmental policy instruments used, it is clearly marginal compared to the significance of environmental problems (the magnitude of welfare losses caused by the destruction of the natural capital and environmental pollution).

   ii. Within fiscal instruments, less efficient subsidies maintain dominance over the more efficient taxes and charges.

   iii. The importance of fiscal solutions used to promote environmental sustainability (the combined size of environmental subsidies and tax revenues) is dwarfed by direct and indirect subsidies and government spending that finance unsustainable activities.

   As a result, the price signals on the market continue to encourage more extensive and polluting production and consumption alternatives with respect to natural inputs.

IV. CONCLUSIONS, RECOMMENDATIONS

a. The goals promoting the sustainable use of natural resources, identified to reduce environmental pollution, incorporated into international agreements, integrated into European Union laws or set forth in national strategies, laws and regulations cannot be

achieved unless the prices reflecting the social cost of environmental damage are integrated into the market economy. In absence of such prices, we will only be able to pursue project based, fragmented environmental sustainability policies that will inevitably lead to marginal and partial results.

While commitment, moral imperative or intellectual discipline or actually the desire to benefit from available subsidies may encourage many people to adopt and adhere to sustainable production and consumption habits for a short time, or a few people to do so for a long time, the society as a whole will only be driven and compelled to do so by carefully designed price information that has a sustained and broad impact.

b. One of the additional key tools to promote sustainable development policy is budgetary planning. Sustainability can only be implemented in this area, if the sustainable development criteria are integrated into the budgetary planning from the very beginning. A budget designed in a business as usual manner, even if it allocates some funds to various sustainable development goals, will not be able to properly support the achievement of the Sustainable Development Goals (SDG).

FINLAND

The 2019 national budget was the first to examine sustainability implications in the general aims of the budget, such as the amount of taxes and subsidies on sustainability, with a focus on a "carbon-neutral and resource-wise Finland. There has been further development of sustainability-based budgeting model both in cities as well as on government level but these have not yet been implemented in practice.

c. Public spending that is still high and supports unsustainable activities need to be excluded from budgets. The termination of environmentally harmful subsidies promotes the double dividend: some environmental conditions will improve and funds will become available to finance other causes.

The Finnish national assessment of sustainable development policies (Berg et al. 2019, p. 61; http://urn.fi/URN:ISBN:978-952-287-655-3) presents the following recommendations: *"Goals, such as the gradual elimination of subsidies that have an adverse impact on the environment and increasing investments that promote sustainable development, should be set for the sustainability of the budget. The budget should be formulated in such a way that state economy funds allocated for dealing with phenomena important to sustainable development can be analyzed as a whole. The*

impact of appropriations on the achievement of goals should be monitored and assessed in the Government Annual Report."

d. The proportion of subsidies provided to solutions reducing the environmental damage and environmental taxes and other economic instruments should be adjusted. The importance of subsidies should be decreased and the solutions putting a price on the use of the environment should be expanded.
e. Taxes are not the only way supporting the pricing of the use of the environment. Other options that help the pricing of the environment include direct regulations, cap-and-trade solutions, the introduction of compensation rules and the allocation of the right for the use of the environment based on the Coase Theorem. The efficiency of the environmental policy-making needs to be improved by selecting and assigning the optimal, most effective controls and regulations to each environmental issue.
f. The revenue-generating effect of environmental taxes should also be taken into account, which may help to reduce other types of taxes. However, the green tax reform must be implemented in a careful, step-by-step manner as environmental tax is one of the most flexible types of tax: taxpayers are not only allowed to reduce their tax base (environmental pollution, the use of natural resources) but are explicitly encouraged to do so as this is the primary reason why this tax is imposed.
g. A powerful budgetary policy promoting the environmental sustainability transition stimulates innovation and thus contributes to sustained economic growth. Meanwhile, this secondary benefit depends on the success of other policies as well, in particular, the improvement of education, research and development, digitalisation and labour market flexibility can have a positive effect in this respect. Fortunately, these areas play an important role in the achievement of other social goals as well.

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