



## **HIGHLIGHTS**



#### Sustainable Finance Guarantee Fund

Creating incentives for commercial leveraging and crowding, the proposed Guarantee Fund, would tie in closely with the proposal for a Sustainable Europe Investment Plan in Commission's President von der Leyen's Political Guidelines.



# Preferential Treatment of Collateral

Accepting certain sustainable assets as collateral by the ECB, and a more attractive treatment of collateral haircut for such assets will foster sustainable finance.



#### Green Loan Securitisation Framework

Generating an attractive structure and size for institutional investors, green securitisation could be one of the most effective potential means to harness small scale developments and act as a multiplier to fund sustainable assets as well as transition efforts.



# Carbon Price and Fiscal Measures

Proposal for number of tax incentives given the significant and direct effect of fiscal incentives in mobilizing capital for sustainable activities.

Stimulating an effective price for carbon emissions could have a positive effect on the bankability of sustainable economic activities.



# Incentives as Policy Catalyst

Given the role of banks as key finance providers to the real economy, appropriately targeted incentives can act as catalyst to EU policies, accelerating the sustainable transformation.



# Sustainable Finance Supporting Factor

Maintaining the link between long term risk considerations and capital, the European Banking Authority (EBA) could explore, using forward looking approaches, preferential capital treatment for certain sustainable assets that show a lower financial risk.



### National Fiscal Incentives Policy Examples

Inspiring examples of fiscal incentives at national level in selected countries.

## OBJECTIVES OF THIS REPORT

To meet the objectives of the Paris Agreement and achieve the Sustainable Developments Goals (SDGs), trillions of euros will need to be mobilised globally. Europe alone has identified a yearly financial gap of more than EUR 180 billion to finance policies and investments necessary to keep the global temperatures in line with the objectives of the Paris Agreement<sup>1</sup>. It is more than obvious, that without the private sector, the funding gap cannot be closed. Given that around two thirds of the European economy is financed by banks, banks play, and will **continue to play a crucial role** in the transition

€180 bn

Investments necessary to keep the global temperatures in line with the objectives of the Paris Agreement

130 Banks with \$47 tn in assets

Signed to support the principles of Paris Agreement

capital providers and capital intermediaries.

to a more sustainable future acting as investors,

While the financial industry is facing some impediments and challenges such as the lack of available projects and products, their competitiveness, or the difficulty in identifying eligible projects or assets to refinance the "pure green financing market" functions relatively well. However, to reach the objectives of the Paris Agreement and SDGs, the growth of sustainable activities must take place throughout all economic sectors, especially manufacturing and services. The sustainable financing markets must mirror the sustainable developments in the real economy and be able to finance and support that development without too many limitations and channel financial resources towards sustainable projects in a timely manner to help transitioning of the economy.

Most companies are at different stages in their transition journey towards low-carbon and sustainable activities. Banks have a role to play in supporting corporates and SMEs on this journey, providing the funding needed to achieve this transformation.

Initiatives such as the Principles for Responsible Banking, developed by the UNEP Finance Initiative in cooperation with 30 leading banks

<sup>&</sup>lt;sup>1</sup> Below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees

around the globe - nine of which are European - help accelerate banking industry's contribution to achieving the Sustainable Development Goals and the Paris Agreement.

As a compass for the sustainable banking future, the Principles are a solid starting point for any bank that aspires to connect financial goals with social objectives.

The Principles also promote a sound risk management and transparency, core fundamentals of banking responsibly. The principles are now signed by 130 banks with USD 47 trillion in assets which represent over a third of the global banking industry. More than half of these banks are from Europe, and going forward, several other European banks are expected to join the Principles.

The steps being taken towards increased sustainability should be encouraged and supported by the legislation. The introduction of an incentive system is necessary given the need to accelerate the shift towards sustainable European economy. In the absence of any time pressure, markets would sort out the financial resources' allocation over time.

The objective of this report is to stimulate and contribute to the debate of the European institutions, regulators and banks on how to:

- O1 Scale up sustainable activities<sup>2</sup>;
- Mobilise and redirect private financial flows to support such activities;
- O3 Develop new instruments to finance sustainable activities;
- O4 Increase the number of projects;
- O5 Help capital market development;
- O6 Promote literacy on Sustainable Finance and overall Sustainability

<sup>&</sup>lt;sup>2</sup> Including transitioning activities that contribute towards increased sustainability.

## SUMMARY

Despite some progress, we are still discussing the need to substantially scale up sustainable activities, develop new instruments, increase the number of 'bankable' projects and mobilise private financial flows to sustainable activities, including via capital markets. The introduction of an adequate set of incentives for the different economic sectors, activities or projects can motivate product issuers and investors to learn about the various types and characteristics of sustainable investments, encourage new actors to enter the market and generate the needed shift into sustainable investments. This could lead to a meaningful increase both in the supply and demandside for sustainable finance products.

Appropriately targeted fiscal benefits applied within reason as well as an adequate carbon price and redirection of subsidies may play an important role in mobilising the switch towards more sustainable actions.

Alternative forms of financing could help reach relevant economic thresholds, leading to a higher rate of implementation of the underlying projects. The aggregation of small-scale projects could generate an attractive structure and size for institutional investors. Green securitisation could be one of the most effective potential means to harness small scale developments and act as a multiplier to fund sustainable assets as well as transition efforts to increase sustainability further. Inclusion of green assets in the cover pool of covered bonds to create Green Covered Bonds would allow increased financing for sustainable projects by strengthening their economic viability. Developing further incentives for green bonds would also increase funding activities in this sector.

Cooperation between public and private sectors is key. Blended finance and public programmes allowing for **guarantees** to incentivise sustainable projects, the integration of sustainable finance into promotional structures, the inclusion of sustainable assets into central banks' eligible assets' frameworks should also be considered.

The European Commission intends to explore the feasibility of including risks associated with climate and other environmental factors in institutions' risk management policies and the potential calibration of capital requirements<sup>3</sup>. The European Banking Authority (EBA) has been mandated by the Capital Requirement Regulation (Article 501c) to assess whether a dedicated prudential treatment of exposures related to assets or activities associated substantially with environmental and/or social objectives would be justified, including by analysing methodologies for the assessment of the

effective riskiness of those exposures compared to the riskiness of another exposure.

This report therefore also aims to contribute to the debate on the potential revision of prudential framework.

While a broad range of incentives could be suggested, we concentrate on a limited number of concrete proposals that have a potential to accelerate sustainable funding and market developments in the banking sector.

<sup>3</sup> "The Commission's thinking behind any potential change in prudential rules is based on the assumption that ignoring risks associated with climate change and other sustainability factors can create longer-term risks for financial stability and costs for banks and insurers, whose assets are exposed to such risks. Therefore, identifying a legally enforceable classification system will need to go hand in hand with a thorough capital calibration in order to not undermine the effectiveness of the EU prudential rules. On this basis, the Commission will also explore the feasibility of recalibrating the capital requirements for banks (so called "green supporting factor") when it is justified from a risk perspective, while ensuring that financial stability is safeguarded. Any recalibration of capital requirements, based on data and the assessment of the prudential risk of banks' exposures, would need to rely on and be coherent with the future EU taxonomy"

#### **Usefull links**

 $https://ec.europa.eu/info/sites/info/files/business\_economy\_euro/banking\_and\_finance/documents/sustainable-finance-teg-frequently-asked-questions\_en.pdf$ 

http://europa.eu/rapid/press-release\_MEMO-18-1424\_en.htm

# The report is structured into five chapters:



## Creation of a European Sustainable Finance Guarantee Fund P.12

It is suggested to create a programme' under InvestEU cutting across different windows with the objective to provide guarantees to financial institutions to support sustainable lending and investments, thus increasing additional sources for these projects as opposed to substituting existing lending sources with cheaper funding for the ultimate beneficiaries(i.e. SMEs and MidCaps).



#### Risk Management: reduction of capital requirements for certain sustainable assets that show a lower financial risk P.18

Pending the development of the methodologies for incorporation of the ESG factors into supervisory framework, and in line with the objective to maintain the link between long term risk considerations and capital, it is suggested that the European Banking Authority (EBA) explores the possibility of introducing a supporting factor for certain assets (Sustainable Finance Supporting Factor) that are classified as sustainable under the EU taxonomy and at the same time, meet additional eligibility criteria established by the EBA. Using forward looking methodologies, it is suggested that the EBA investigates whether there are groups of assets/activities under the EU taxonomy that show a lower financial risk, and, specifically, a lower credit risk profile. The supporting factor would only apply to such eligible assets after the capital has been computed as usual and therefore be used as a "discount at checkout", irrespective of the use of the standard or the IRB/IRBA approach, the type of financial product or its duration. It is also proposed to recognize the efforts to steer portfolios towards

decarbonisation from a risk management perspective, provided the progress can be reliably measured.



#### **European Green Funding**

P.30

The volume of loans for sustainable finance will increase and will represent a potential for the development of covered bond and securitization markets for green loans in Europe.

A clear definition of eligible assets is needed in order to ensure rising volumes that will constitute cover pools for green covered bonds.

A possible subsidy to offset the additional cost of external verification/second opinion or targeted fiscal incentives are likely to increase the attractiveness of green bonds. If there is lower risk of Green Covered Bonds, a preferential prudential treatment compared to other funding instruments not collateralised by sustainable assets could be reasonably expected. Green securitisations could be one of the most effective potential means to harness small scale developments, provided that the current regulatory constraints on the use of the STS label are addressed. Development of a European Securitization Mechanism for Green Loans with an additional Green European modified STS label, in a similar

way to the Green Bond label, and a possible guarantee of a recognized public body (e.g. EIB) is being proposed. The concept of the proposed Sustainable Finance Supporting Factor could be applied at the end of the usual credit risk assessment performed by the bank, within the securitization framework

The following adaptations to the securitization framework are proposed:

- (i) allowing prudential deconsolidation and capital relief for the originating bank (for both synthetic and cash securitizations), based on reviewed criteria to assess the Significant Risk Transfer;
- (ii) removing current disincentives in the regulatory treatment for investors (for instance in the liquidity framework and in Solvency 2).



#### Preferential treatment of collateral P.36

Green Bonds, Green Loans or Green securitization should be included under the eligible assets as acceptable collateral if certain attributes are met. Furthermore, to foster investing in sustainable assets, the ECB and Central Banks could revise the current haircut policy and apply smaller haircuts to sustainable assets and debt instruments (no matter their type).



#### Fiscal and financial measures

P.38

The last chapter presents existing examples of fiscal and financial incentives at national level as well as proposals of tax incentives and subsidies for sustainable products as these have a significant and direct effect in mobilizing capital for the purpose of funding sustainable activities. The report also encourages the European institutions to support and improve the carbon emissions trading system (ETS) or to otherwise stimulate an effective price for carbon emissions (e.g. by speeding up the rate at which the carbon cap is reduced and by more frequent adjustments of benchmarks used as a basis for allocating free emission permits).

In order to sustain these market developments and safeguard an inherent proper assimilation, it is important, from the outset, to promote Sustainability Literacy among all stakeholders, and develop special Literacy programmes for groups such as owners of small and mediumsized enterprises (SMEs) and retail investors.

Finally, to facilitate the efforts of the financial sector to steer the funding towards sustainable activities, we call for the EU to open up its databases that collect environmental reporting data and make those re-usable for finance providers.

## **INTRODUCTION**

With banks' essential role of financing the economy comes an important responsibility to society. As a partner in everyday life, whether for individuals, companies, social business or government, the banking industry has long been aware of the broad role it plays in society. Interacting responsibly with individuals and businesses, responding to the demands and expectations of consumers, investors, companies and their own employees is key.

Banks are eager to connect societal and financial goals and contribute effectively to major challenges such as climate change and the sustainable energy transition and social inclusion. Many European banks are increasingly looking to embrace sustainability as a key element of their business strategy and to contribute to the objectives of the Paris agreement and SDGs.

However, individual actions are not sufficient to address the sustainability challenges properly. At EU level, we believe these initiatives should be complemented by a well-designed regulatory framework that can reduce uncertainty, ensure comparability, allow competitive solutions on a global basis and mobilise the shift towards more

sustainable activities and its financing. Currently, the sustainable finance market is limited to a restricted number of actors and products, affecting only certain sectors. For example, renewable energy, industrial energy savings and climate change mitigation projects, automotive (electric cars), real estate developers financing green buildings, social enterprises, some other "pure play environmental" companies such as those dealing with waste, water, environmental technology, forestry and rail are the obvious current market actors. However, to reach the objective of Paris Agreement, the growth in sustainability must also come from other sectors such as manufacturing and services.

If financial flows are to be mobilised in the required volumes and speed, both on supply and demand side, the legislative and nonlegislative framework should be reviewed, to encourage and reward sustainability. The implementation of specific incentives to support lending and investment into sustainable projects, technical assistance, as well as risk-sharing by the public sector, would act as a catalyst to EU policies, bearing in mind the role banks play as providers of finance.





#### 1.1 Background

Credit guarantee mechanisms are a commonly used response to market failures and market weaknesses in the area of corporates' access to finance. Guarantees usually reduce the risk of lenders/investors and favour the provision of financing to viable businesses that are constrained in their access to finance. On the other hand, public guarantees to private investments/lending, transfer risk from the private to public sector, so the use of any guarantee mechanism has to be carefully considered and well justified so as not to misuse the taxpayer's money.

The European Investment Fund (EIF) is Europe's leading risk finance provider for small and medium-sized enterprises (SMEs) and mid-caps, with the central mission to facilitate access to finance. As part of the European Investment Bank (EIB) Group, the EIF designs, promotes and implements equity and debt financial instruments which specifically target SME needs. In this role, the EIF fosters EU objectives in support of innovation, research and development, entrepreneurship, growth, and employment, supporting enterprises through a wide range of

selected financial intermediaries across Europe. The number of credit guarantee schemes in support of European SMEs has increased in the past decades. A wide range of core guarantee schemes are in place such as the "InnovFin SME Guarantee Facility" programme, aimed at innovative SMEs and small mid-caps, the Cultural and Creative Sectors (CCS) Guarantee Facility, the Employment and Social Innovation Programme (EaSI).

Among the guarantee instruments, a relevant role is played by the European Fund for Strategic Investment (EFSI), managed by the EIB, which is one of the three pillars of the Investment Plan for Europe and helps to finance strategic investments in key areas such as infrastructure, research and innovation, education, renewable energy and energy efficiency as well as risk finance for SMFs.

It is worth noting that the European Council (June 2019) called on the EIB to step up its climate activities, whereas Commission's President von der Leyen's Political Guidelines (July 2019) note that her aim as Commission President is to turn parts of the EIB into Europe's Climate Bank.

# 1.2. European Sustainable Finance Guarantee Fund as a complement of the new InvestEU programme

One of the main objectives of the InvestEU Programme, the EU's dedicated investment programme for the Multi-annual Financial Framework (MFF) 2021-202, is creating one centralised single programme and single instrument, bringing together under one roof the multitude of EU financial instruments currently available. Whilst different by design i.e. open to several implementing partners such as the national or regional promotional banks, InvestEU remains similar to the EFSI in its objective to increasing the risk bearing capacity of the European Investment Bank (EIB) Group which is set to implement 75% of the InvestEU Fund, but also of other financial partners4.

The EU guarantee under InvestEU will continue to allow the EIB to invest in more risky projects (while keeping the AAA rating) as it is currently the case with EFSI. The possibility for other

This is expected to lead to further public and private financing along the financing chain, crowding-in investors. Member States may increase the EU guarantee's provisioning by voluntarily channelling up to a small share of their Cohesion Policy Funds (lower than 5%).

#### Programmes replaced by the InvestEU Fund

Equity Instruments		Guarantee Instruments	Risk Sharing Instruments
CEF Equity	EaSI Guarantee	COSME Loan Guarantee Facility	Natural Capital Fin. Fac.
COSME EFG	EFSI	Private Finance for Energy Efficiency	Innovfin Risk Sharing
EaSI Capacity Building IW		Innovfin Debt	CEF Debt
Innovfin Equity	Student Loans GF	Cultural and Creative Sector GF	Instrument

International financial institutions active in Europe such as the European Bank for Reconstruction and Developments (EBRD), the World Bank and the Council of Europe Bank - national promotional banks and also commercial banks

financial institutions to benefit from the EU guarantee should enlarge and diversify the pipeline of projects and increase the potential pool of final beneficiaries.

The budget guarantee is divided between four policy areas, a key one being the sustainable infrastructure policy window that covers "sustainable investment in the areas of transport, energy, digital connectivity, supply and processing of raw materials, space, oceans and water, waste, nature and other environment infrastructure, equipment, mobile assets and deployment of innovative technologies that contribute to the environmental or social sustainability objectives of the European Union, or to both, or meet the environmental or social sustainability standards of the European Union".

€11.5 billion or 30,3% of the EC guarantee will be allocated to sustainable infrastructure, an amount that can be further adjusted by the European Commission up to 15% to adapt to evolving policy priorities and market demand.

According to the partial preliminary agreement reached in March 2019 by the co-legislators, at least 55% of the investment under the sustainable infrastructure policy window has to contribute to the European Union objectives on climate and environment.

## €11.5 billion or 30,3% of the EC

guarantee will be allocated to sustainable infrastructure

Window	Budgetary Guarantee	Mobilised Investment (estimate)
Sustainable infrastructure	11500	185000
Research, Innovation and Digitalisation	11250	200000
SMEs	11250	215000
Social investment and skills TOTAL (eur million, in current prices)	4000 38000	50000 650000

- Budget for InvestEU, Advisory HUB, InvestEU Portal and accompanying measures is proposed to be €525 m
- InvestEU is expected to mobilise more than €650 bn of additional investment across Europe

It can be argued that the sustainable infrastructure window of the InvestEU Fund that replaces the different sustainabilityrelated programmes existing until now covers to a relevant extent the funding needed. Nevertheless, taking into account the estimated extra €180 billion a year of additional investment needed to achieve the EU's 2030 climate targets, any proposals for additional mechanisms and programmes can be worth considering.

One possible mechanism to contribute to financing the climate-related investments would be the creation of a specific European Sustainable Finance Guarantee Fund, that could be a programme under InvestEU cutting across different windows. This would also tie in closely with the proposal for a Sustainable Europe **Investment Plan in Commission's President von** der Leyen's Political Guidelines.

The objective of such a European Sustainable Finance Guarantee Fund, after completion of the EU taxonomy, could be a way to provide guarantees for several "de-risking mechanisms" linked to sustainable finance in latter stages of the "financing chain", for financing entities and end clients (for example, SMEs)<sup>5</sup>, creating incentives for commercial leveraging and crowding in.

The focus of the Fund should be **on guarantees** provided to financial institutions (private banks or medium-/long-term investors such as funds or insurance companies) to support sustainable lending and investments, thus increasing additional sources for these projects as opposed to substituting existing lending sources with cheaper funding for the ultimate beneficiaries (i.e. SMEs and MidCaps).

In this way greater risk-taking by banks and financial investors would be ensured, be given a more even distribution with a guarantee in place, and, effectively help mainstreaming of sustainable finance.

<sup>&</sup>lt;sup>5</sup> The Energy Savings Insurance Model is a good example of such a mechanism.

The fund would not be a subsidy per se, but an encouragement to ignite the driving force of private capital flowing towards sustainable activities, not overlapping with other, already existing guarantee Funds in the Member States, but working with them in a synergy way.

#### The Fund should benefit:



The EU proceeds and support of environmental and social objectives as set out in the 2030 agenda and fostering the EU Action Plan for financing sustainable growth;



Banks/financial investors, by sharing a considerable part of the risk and being encouraged to embrace the Action Plan (taxonomy, risk systems, etc.) in order to be meaningfully engaged;



Beneficiaries, by accessing reasonably priced financing; as the guarantee lowers the risk of the transaction, the bank/the investors will ask lower costs/yields from the beneficiary; this will allow the beneficiary to obtain better priced financing than without the guarantee.



#### 2.1 Capital reduction to support sustainable finance

#### 2.1.1 Background

Banks are required to hold sufficient capital buffers to cover for unexpected losses and remain solvent in a period of stress. As a main principle in the Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CRR) (and their revisions), the amount of capital required depends mainly on the credit risk related to bank's risk exposures. The riskier an exposure is, the higher the risk weight (RW) of the asset and the amount of capital required.

The estimation of the level of risk is often based on a retrospective analysis (time series) that has proved to be predictive of the credit loss, taking into account a set of characteristics of the exposure and of the counterparty.

Sustainability-related financial risk will become integral part of risk management framework and risk management practices. This is however a complex issue and banks are currently at different stages with differences in terms of

tools they are using or developing in relation to risk management, governance pricing or measurement of ESG risks.

While, as an ultimate goal, all aspects of sustainability, including environmental, social and governance should be considered, currently the sustainability in banking is based primarily on the assessment of the environment and to a certain extent the social aspect. Governance risk is often evaluated as part of the operational and reputational risk. Despite the emergence of some methodologies in the area of climate risk, computing ESG-related financial risk remains challenging, given, the lack of data, the longterm nature of the climate risk, the number of assumptions that need to be made and the know-how to assess the future ESG risk profile of the counterparties. The risks and related adaptation and mitigation strategies/actions, together with their corresponding impact on the economy are not yet fully understood.

The speed of negative climate change impact, potential new climate regulation or taxation and changing consumer behaviour represent a structural breach. The traditional retrospective approach does not capture the risk. While

sound forward-looking techniques capturing the longer-term nature of environmental risks are emerging they are not yet available at large scale, and may not be easily incorporated into the prudential framework given the different time horizon<sup>67</sup>.

The EBF is willing to take an active part in the development of proper new methodologies, the collection of experience necessary for a better integration of the ESG dimensions into the internal rating systems for IRB approaches, as well as solutions for the Standardised Approach.

https://www.ecb.europa.eu/pub/financial-stability/fsr/special/html/ecb.fsrart201905\_1~47cf778cc1.en.html#toc1

Reference to the methodology for pricing forward-looking climate risks in the value of sovereign bonds: Battiston, S. and Monasterolo, I. (2019). A climate risk assessment of sovereign bonds' portfolio. Working paper available at SSRN: https://ssrn.com/abstract=3376218.

<sup>&</sup>lt;sup>6</sup> ECB - Climate change and financial stability "A monitoring framework for climate change-related risks in the financial sector would require more comprehensive information on carbon emissions and the exposures of banks and other financial institutions. In addition, scenario analyses and/or stress tests need to be developed to cater for transition risk in a forward-looking manner."

<sup>&</sup>lt;sup>7</sup> Some forward-looking approaches are emerging even if mainly in the field of investment portfolios. For example CLIMAFIN methodology, is now applied by several central banks and regulators (e.g. EIOPA) to price climate transition risks in the value of sovereign bonds and assess the largest losses on insurances' portfolios. The methodology is transparent and peer reviewed and already operational and applied e.g. to the portfolio of the Austrian National Bank)The logical framework (taking into account climate scenarios and climate policy/transition scenarios in order to assess the risk connected to some assets) could be analysed in order to be replicated on sample exposure from a portfolios of loan exposures asset classes. For the climate stress test methodology using forward looking climate transition scenarios and shocks trajectories to calculate climate financial risk metrics, please refer to: Battiston S., Mandel A, Monasterolo I., Schuetze F. & G. Visentin (2017). A Climate stress-test of the EU financial system. Nature Climate Change, 7, 283-288.

<sup>&</sup>quot;Climate risk and financial stability in the network of banks and investment funds" Alan Roncoroni, Stefano Battiston, Luis Onesimo Leonardo Escobar Farfan, and Seranfin Martinez Jaramillo.

We are also willing to work with regulators and supervisors on developing methodologies, scenarios and risk assumptions, necessary for risk analysis and for the exploration of possible measures under Pillar II, as well as reporting requirements.

Pending the development of the methodologies and validation of the IRB or A-IRB models factoring ESG dimensions<sup>8</sup>, we propose to the EBA that it explores the possibility of introducing a supporting factor leading to reduction of capital requirements for certain eligible sustainable assets for the following reasons:

- Further improvement of bank's funding capacities by aligning their investment decisions with the sustainable finance goals as determined by the EU;
- Development of attractive and competitive financial solutions for sustainable clients and projects, supported by sustainability literacy and training programmes, thus stimulating the market:

We also see merit in investigating the potential contribution of the supporting factor to the below policy objectives:

- Accelerating the implementation of forwardlooking ESG screening by banks;
- Fostering the decision of corporates and SMEs to invest in the transition towards a sustainable business thanks to the better credit conditions that banks are likely to apply under a more favourable prudential treatment for eligible sustainable exposures;
- Improving performance of the business sector as companies' awareness of the ESG impact tends to lead to better management decisions, thus contributing to improved and more stable performance.

Sustainable activities often benefit from environmental/social public policies and general consumption trends which are likely to impact their performance positively, extending this positive effect to the financial and credit

<sup>&</sup>lt;sup>8</sup> Once a bank will have a validated IRB o IRBA model that factors in the ESG dimension, the supporting factor will no longer be applicable.

market perspective, because of an improved credit risk valuation. Research into the performance of sustainable investments, both in terms of risk and profitability is emerging?. Given that there is already some evidence that the performance of companies listed on the stock exchange and the quality of governance are correlated, we would expect a similar correlation to be found between the ESG performance of companies and their ability to manage climate risk, especially in those sectors where this ESG-related risk is most significant.

The ongoing study of the Network for Greening Financial Systems is also expected to contribute significantly to the debate as to whether and to what extent the risk profile of different assets (loans, bonds and equities) is affected by their sustainability profile.

**Credit risk sensitivity** should be followed as a main principle when considering any capital reduction measures. The capital relief should be, to a certain extent, reflective of the reduced financial risk, while acting as an incentive to invest in sustainable activities at the same time.

#### 2.1.2 Sustainable Finance Supporting Factor (SFSF)

As a precondition for the introduction of any measure, it is important to identify sectors, activities and projects that are considered not only green but sustainable in general as envisaged by the EU taxonomy. The identification should be based on a uniform set of criteria in order to ensure level playing field. Pending the development of the methodologies for incorporation of the ESG factors into the

https://bankunderground.co.uk/2018/10/16/insulated-from-risk-the-relationship-between-the-energy-efficiency-ofproperties-and-mortgage-defaults/

Roughly 90 % of academic studies find a non-negative relation between ESG criteria and financial performance with an overwhelming share of studies showing positive results (sustainability results in financial outperformance). Gunnar Friede, Timo Busch & Alexander Bassen (2015) ESG and financial performance: aggregated evidence from more than 2000 empirical studies, Journal of Sustainable Finance & Investment, 5:4, 210-233, DOI: 10.1080/20430795.2015.1118917 https://doi.org/10.1080/20430795.2015.1118917 https://www.moodys.com/research/Moodys-Project-finance-bank-loans-for-green-use-of-proceeds-PBC 1141935?showPdf=true

<sup>9</sup> E.g. Imperial College Business School - Centre for Climate Finance & Investment" (research project on "Risk Weighted Assets (RWAs) and Climate Risk;

supervisory framework and in line with the objective to maintain the link between long-term risk considerations and capital, we suggest that the European Banking Authority explores the possibility of introducing a supporting factor for certain assets that are classified as sustainable under the EU taxonomy and, at the same time, meet additional eligibility criteria established by the European Banking Authority.

The proposed supporting factor (Sustainable Finance Supporting Factor) would therefore apply to exposures related to a sub-category of sectors/ activities/projects (SSAP) of sustainable taxonomy currently under development in the EU. Using forward-looking methodologies<sup>10</sup>, we suggest that the European Banking Authority investigates whether there are groups of SSAP

under the EU taxonomy that show a lower

#### financial risk, and, specifically, a lower credit risk profile.

To identify the eligible SSAPs, we suggest that the EBA conducts sample studies in order to collect evidence as to which SSAPs show a reduced financial/credit risk after integration of ESG considerations. The objectives of such studies would be the identification of SSAPs with samples that are characterised by a positive delta ESG risk.<sup>11</sup> A positive delta ESG risk means that given a certain level of foreseen financial risk, by integrating the ESG profile (regardless of the approach)<sup>12</sup>, a decrease in the level of financial risk will occur. We call these **eligible SSAPs**. The eligible SSAPs should be disclosed by the EBA. The exposures belonging to such eligible SSAPs could then benefit from a lowered capital requirement by

<sup>&</sup>lt;sup>10</sup> To evaluate if some SSAP show a reduced climate related financial risk, we suggest to take into account at least two time horizons: (3-5 years) and (5-10) years.

<sup>11</sup> A potential eligible SSAP could be the one that might be identified with the EEMAP project on energy efficient mortgages.

<sup>12</sup> Some technics already used in other ESG studies could be applied at a sectorial/SSAP level in order to integrate the ESG dimension into the traditional prospective economic evaluation. Among these:

<sup>•</sup> Sectorial forecasted financials: Adjustments are made to forecasted financials for the expected impact of ESG factors

Sensitivity/scenario analysis: Adjustments are made to variables (sensitivity analysis) and different ESG scenarios (scenario analysis) are applied to valuation models to compare the difference between the base-case sectorial valuation and the ESG-integrated valuation.

#### means of application of a supporting (reduction) factor on their already calculated RWA.

For a well-calibrated prudential regime, eligible SSAPs could be further clustered into a number of Eligible Sustainable Asset Classes (ESAC). For instance, in the CRR, "Salary found credits" exposures are a specific asset class (a sub-asset class of retail exposures) and receive a specific treatment. Therefore, other sub-asset classes can be defined in relation to some eligible SSAP (e.g. green or energy efficient mortgages, energy efficiency device production, etc.).

Introducing a targeted supporting factor for eligible SSAPs exposures does not substitute the creditworthiness assessment performed by credit institutions and required by the existing prudential framework. As with any other credit exposure, the first prerequisite to grant the credit remains a proper credit quality standing and proper risk management. Therefore, as in the case of any other specific asset class already foreseen in the CRR, the creditworthiness of eligible borrowers and capital requirements will be assessed by banks according to the Regulations and Guidelines in force, before the supporting factor is applied, as an adjustment to risk weights for nondefaulted exposures. The supporting factor would

only apply after the capital has been computed as usual and therefore be used as a "discount at checkout", irrespective of the use of the standard or the IRB/IRBA approach, the type of financial product or its duration.

Exposures that are sustainable under the EU taxonomy but do not belong to the eligible SSAPs would not benefit from the reduction in own funds requirements and will continue to be subject to the usual capital calculation regime. As for the supporting factor on infrastructure and social projects recently introduced (Art. 501a of CRR II), which can be combined with the one for SMEs exposures (SMESF), it should be possible to combine the SFSF with other supporting factors. The application of one supporting factor should not rule out the application of other supporting factors; rather, there should be a cumulative approach making it possible to acknowledge all the relevant factors for each category.

The introduction of the supporting factor should be subject to an evaluation three years after its introduction, in particular, to assess its effectiveness in steering funds towards sustainable activities and the increase in the proportion of banks' sustainable business.

Sustainable Finance Supporting Factor



- Other RWAs
- Rejected
- ESAC Incentivised
- Other considered as sustainable

#### Summary of the main SFSF features

- Limited scope application to eligible Sustainable Sectors / Activities/Projects (SSAP) with reduced financial risk identified by the EBA.
- Risk sensitivity: the eligible SSAP with reduced financial risk assessed by forward-looking approaches - could be clustered into a number of eligible sustainable asset classes (ESAC) under the prudential regime (e.g. green mortgages, energy efficiency device production, circular economy projects, etc.).
- Objectivity scope defined by the EBA.
- Level playing field the SFSF would apply to both standard and IRB / IRBA approaches.
- Not replacing risk management the application of the SFSF would not exempt the banks from the prior creditworthiness analysis. The SFSF would apply only after calculating own funds requirements as usual. The SFSF would be applied as a "discount at checkout", similar to the SME Supporting Factor.
- Relatively easy implementation based on information provided by third parties in terms of simple codes of eligible SSAP or ESAC.
- Evaluation after 3 years.

#### Illustrative example

- Bank X has 100 potential credit deals.
- Following creditworthiness analysis, 90 are approved and become exposures.
- Under existing prudential regulation, 90 RWAs are being computed.
- Out of 90, 30 exposures are considered sustainable according to the EU taxonomy defined by the Technical Expert Group (TEG).
- Out of 30, 10 will be eligible following the EBA classification (meaning these have a lower sustainability-related financial risk). The bank will only check which out of 30 exposures belong to the eligible SSAP or ESAC as disclosed by the EBA.
- Banks will apply SFSF on the 10 RWA linked to the eligible SSAP or ESAC.
- This applies both to STA and IRB/A-IRB approaches but once banks applying IRB/IRBA approach will have embedded the sustainability profile in their validated internal rating model, the SFSF can no longer be used.

Pending the completion of the EU Taxonomy, eligible SSAPs could, if necessary, be identified by means of Sustainability Performance Indicators (SPIs) identified by the EBA that could also incorporate adaptation activities and social factors<sup>13</sup>. For the definition of relevant SPIs, there are several options, methods and data to consider, some of them already available at the FU level.

On the mitigation side, some specific, measurable, attainable, relevant and time-bound (S.M.A.R.T.) indicators are emerging such as 14:

- environmental satellite accounts on sectoral CO2 emissions:
- sectoral external costs intensities:
- emissions embodied in products (input-output analysis).

Moreover, in order to assess whether an exposure can be considered SSAP, a threshold on the SPI can be set, for example, at the below average sectorial level. This has to be discussed

further before any concrete proposal can be put forward.

Concerning the SPIs which could take into account adaptation measures for sustainable development, we believe that initially they could be qualitatively defined in relation to the adoption of at least a minimum number of specific measures related to the main hazards.

The definition of the SPIs could also take advantage of data from the European Environmental Agency, or the OECD, among others, and should capture environmental impact on CO2 and other emissions, biodiversity, production of waste, the use of energy and renewable energy, raw materials, water, and direct and indirect land use, as laid out in the Commission Monitoring Framework for the Circular Economy (COM/2018/29 final), the EU Action Plan for the Circular Economy (COM/2015/0614 final) and in the European Parliament's "Resolution of 9 July 2015 on resource efficiency: moving towards a circular

<sup>13</sup> Attention should be paid to criteria set out in art.2.1 Reg. 1296/2013 and to activities of working and social inclusion and social cohesion).

<sup>14</sup> Journal of Sustainable Finance & Investment - Environment - risk-weighted assets: allowing banking supervision and green economy to meet for good Lorenzo Esposito, Giuseppe Mastromatteo & Andrea Molocchi

economy (2014/2208(INI))". Furthermore, the indicators should also be designed to take into account the recommendations of the Support to Circular Economy Financing Expert Group of the European Commission.

Finally, a proper use of taxonomy and further development of methodologies will largely depend on the availability of data. Environmental, Social and Governance (ESG) data can already be obtained from several data providers today, and progress can be noted too in the corporate ESG reporting. Further improvement on ESG data collection may result from the new data collection requirements envisaged by the EBA loan origination Guidelines, currently under consultation. However, the availability or exploitability of the ESG data on a wide range of investee companies' activities and/or practices is still strikingly insufficient and little is envisaged in terms of upgrading, standardising or requesting improved data disclosure from corporates. It is important to note that legislation affecting the reporting of non-financial information does not cover a large part of the European business sector and may constitute a barrier to the objectives of accelerating market

transition, as it does not make it possible to collect comprehensive data on ESG criteria and associated performance. To facilitate the efforts of the financial sector to steer the funding towards sustainable activities, we call for EU to open up its data-bases that collect environmental reporting data and make those re-usable for finance providers.

Relying on market incentives or direct engagement from financial market participants with corporates is not enough. It also underestimates the costs of obtaining data from companies that do not publish ESG information in their usual disclosures, nor indirectly through third parties. The quality of the data varies, and obtaining high quality, relevant and reliable data is expensive. The availability of ESG data, if not dealt with appropriately, will be a clear source of competitive distortion between the largest corporates and the small- and mediumsized companies. It should therefore be the priority of the EU legislators to ensure the symmetry between the objectives to mainstream sustainable finance, screening criteria and proper risk management on one side and the reporting requirements from companies on the other side.

#### **2.2** Economic capital allocation: climate alignment portfolio management

Outside of looking at climate risk at a dealby-deal level, we are in favour of increasingly steering complete portfolios towards a decarbonisation path, thereby reducing both transition-related and systemic risk created by climate change.

In this area, banks have the possibility to show at a portfolio level how progress is being made towards decarbonisation, using customer data in combination with sector available statistics from reputable institutions. We note here the work being undertaken by the 2 Degrees Initiative to extend their PACTA tool to bank lending, which provides such a metric on a sector and borrower basis. Another good approach has been developed by the Platform for Carbon Accounting Financials (PCAF). Both

organisations invest in relevant statistical data to be able to measure in a science-based way progress towards the Paris goals of limiting climate change, which seems the only valid way of evaluating actual contribution to mitigating) climate risk and related financial damage.

Several possibilities related to the setting of science-based targets or metrics can be envisaged. Practically, the above allows us to determine to which extent the lending of each institution and per sector contributes to reaching the goals of the Paris agreement. Where this can be proven for a material proportion of businesses, and without cherry picking, it should be recognised from a capital requirements' point of view, thereby influencing asset allocation, pricing, and ultimately the behaviour of the market. A bank using this kind of forwardlooking methodology for one specific sector will have a lending portfolio in this sector aligned to the Paris Agreement, and in consequence, will have lower transition risks 15.

<sup>15</sup> Emerging research shows that better sustainability is to be associated with lower default risk. Banks with high sustainability scores (which reflects in their lending operarations) have significantly lower default risk, as well as lower contribution to financial system risk. https://www.nature.com/articles/s41599-019-0315-9





Funding, and structured finance, in particular, could play an important role by focusing on sustainable assets that could be financed, potentially, by "green/sustainable funding solutions". The volume of loans for sustainable finance will increase and will represent a potential for the development of Covered Bond and Securitisation markets for green loans in Europe.

For instance, the Energy efficiency Data Protocol and Portal initiative<sup>16</sup> aims at defining a Common Data Template for the Gathering, Processing and Disclosing of Data related to Energy Efficient Mortgages. 17 Together with the Energy efficient Mortgage Action Plan (EeMAP), EeDaPP aims to create a standardised **European framework for mortgage loans** which incentivises home buyers to improve the energy efficiency of their properties or to acquire already energy efficient homes by

way of favourable conditions linked to the loan. This initiative will be a support tool for banks which are considering issuing energy efficiency mortgages in compliance with the EEMI definition published in December 2018 and hence, will enrich the so-called "green mortgages" asset class.

The EeMAP/EeDaPP threshold for the Energy Efficient Mortgage is fully recognised in the threshold for "Renovation of existing buildings" in the Technical Expert Group of the European Commission proposal on the Taxonomy on 18 lune 201918.

#### 3.1 Green and sustainability bonds and green covered bonds

Green Bonds and Green Covered Bonds may prove instrumental in mobilising the bond

<sup>&</sup>lt;sup>16</sup> The Energy efficiency Data Protocol and Portal (EeDaPP) is an EU-funded project under the Horizon 2020 programme. Started in March 2018, EeDaPP is part of a wider initiative, the Energy Efficient Mortgage Initiative (EEMI).

<sup>&</sup>lt;sup>17</sup> The energy efficient mortgages or green mortgages are a potential collateral for both covered bonds and securitisations.

<sup>18</sup> a) The renovation is compliant with energy performance standards set in the applicable building regulations for major renovations transposing the Energy Performance of Buildings Directive (EPBD); or,

b) The renovation achieves energy savings of at least 30% in comparison to the baseline performance of the building before the renovation. The baseline performance and predicted improvement shall be based on a specialised building survey and be validated by an accredited energy auditor.

market for climate change solutions. The Green Bond market has considerably raised volumes of issuances in the last years, reaching EUR 147 billion in 2018, with a continuing rising demand from investors.

We also note the emergence of Sustainable Bonds, catalysed by the ICMA Sustainable Bond Guidelines launched in June 2018 which have supported growth in issuance. In 2019, Spain, Germany and the Netherlands were the three largest issuing countries for sustainability bonds.

The Green Bond Market will furthermore be fostered by the EU Green Bond Label, following the proposal for an EU Green Bond Standard published by the Technical Expert Group of the European Commission on 18 June 2019.

We would like to encourage the European Commission to follow the recommendations of the Technical Expert Group to support the development of the EU Green bond market.

A possible subsidy, to offset the additional cost of external verification/second opinion, or targeted fiscal incentives, are likely to increase the attractiveness of green bonds as they offset

the issuance costs with conventional bonds. Green Covered Bonds will benefit from very mature financial instruments as covered bonds are used mostly in EU countries and are a major source of mortgage funding at EU level. With Green Covered Bonds, the issuances are collateralised by green or sustainable assets.

The Green Covered Bond market is currently less mature than the Green Bond market. However, it will certainly develop over time as the availability of green or sustainable collateral will also grow in banks' balance sheets.

So far, the issuances of Green Covered Bonds are limited, owing, for example, to the complexity and difficulty of obtaining a sufficient volume of assets to support issuances under the funding programmes.

Therefore, a clear definition of eligible assets is needed in order to ensure rising volumes that will constitute cover pools for green covered bonds. Furthermore, the definition must make it possible to have different degrees of green<sup>19</sup> depending on the share of loans in the cover pool fulfilling the taxonomy criteria. Otherwise, there is the risk that the financial sector will not

<sup>19</sup> Aligned with the taxonomy minimum criteria to ensure there are no assets that would not be compliant with the taxonomy at least at the minimum level. This would help establishing of a European asset class.

be able to act as a catalyst for more sustainable finance in every country<sup>20</sup>.

If there is lower risk of Green Covered Bonds, a preferential prudential treatment compared to other funding instruments, not collateralised by sustainable assets, could be reasonably expected. We support the recommendations of the TEG suggesting that the EBA, as part of its mandate, also assesses the possibility of developing a segment of green bonds that would define the conditions to be met by the EU-Green Bond Standard in order to benefit, potentially, from a preferential prudential treatment.

#### 3.2 European Green Loan **Securitisation Framework**

#### 3.2.1 Background

The size of individual transactions to make sustainable finance viable through Green Bonds, Green Loans or Positive Impact loans instruments is huge. Therefore, these instruments can exclude a significant proportion of smaller investments that, taken in aggregate, are needed to fund global sustainability goals.

Therefore, alternative forms of financing could help reaching relevant economic thresholds leading to a higher rate of implementation of the underlying projects. The aggregation of smaller-scale projects could generate an attractive structure and size for institutional investors, mobilising finance that would otherwise not be available for sustainable purposes. Such aggregation would benefit from the development of a securitisation mechanism for green loans.

Green securitisations could be one of the most effective potential means to harness small scale developments like green mortgages, residential rooftop solar energy and small SME loans for energy storage projects.

#### The European Green Loan Securitisation

Framework could be a powerful tool and act as a multiplier to fund sustainable assets as well as the transition efforts to further increase sustainability. However, the recently revised securitisation framework is not sufficiently attractive to issuers or investors and is unlikely to incentivise securitisation. It needs to be reviewed to encourage financing of sustainable assets and its subsequent refinancing through securitisation.

<sup>&</sup>lt;sup>20</sup> In some countries covered bonds are issued out of large cover pools with both commercial and residential buildings as collateral. If cover pools must only consist of taxonomy eligible assets the liquidity of the bonds will be smaller leading to more expensive loans discouraging borrowers for aiming for green loans.

Further review of the securitisation framework in Europe should therefore be anticipated as a priority in future legislation. In order to do that, a regulatory mistrust towards securitisation has to be overcome first. A true political willingness to develop capital markets by eliminating all the existing barriers is a first necessary precondition for any further progress. Only then can any technical solutions (also "green and sustainable") be envisaged.

In the US, for instance, the public securitisation market represents above USD 7 trillion, mainly with mortgages, whereas a similar framework does not exist in Europe. The success of securitisation in the US has been the confidence shown in solving the trust issue. That confidence is given by the government sponsored entities (GSEs).

The Simple, Transparent and Standard (STS) Securitisation Regulation, which entered into force in January 2019, aims at creating a label that will give investors more assurance that there is quality. However, the STS Regulation will not help re-launch the securitisation market in Europe. It introduces so many regulatory and operational constraints that it is more likely to disincentivise securitisation issuances further. Issuing a STS securitisation is extremely demanding and operationally constraining. It requires meeting more than a 100 criteria with

very limited benefits in terms of cost and capital. In addition, current capital requirements for transactions meeting the "best in class" STS criteria remain significantly higher than those for other high-quality fixed income investments: if a bank holds a securitised product on its balance sheet, it is extremely punitive to its regulatory Liquidity Coverage Ratio. STS is qualified as HQLA Level 2b, with a haircut of 25% (residential loans, fully guaranteed residential loans, auto loans) or 35% (loans to SMEs, other consumer loans etc.).

#### 3.2.2 Potential of the securitisation in promoting sustainable finance

The volume of loans for sustainable finance will increase and will represent a potential for the development of the European securitisation market for green loans, provided that the current regulatory constraints on the use of the STS label are addressed.

Now that the STS regulation is in force, the application of this label should be reviewed and further developed, building on the substantial potential of securitisation in promoting sustainable finance.

Different technical solutions could be envisaged. The development of sustainable finance could be facilitated by the setting up of a European

Securitisation Mechanism for Green Loans with an additional Green European modified STS label, in a similar way to the Green Bond label, and a possible guarantee of a recognised public body, for example the European Investment Bank.

The great advantage of such an initiative would be to allow both the development of a market financing solution targeted by the Capital Market Union, and the support of sustainable finance.

The additional green STS-improved securitisation label would attract investment funds targeting green investments. The public organisation guaranteeing the securitisation could also play a role in certifying that the green securitisation criteria are met. Alternatively, an accreditation regime for external reviewers could be envisaged in the way that it is for the EU Green Bond Standard.

#### 3.2.3 Prudential treatment of an European green loan securitisation

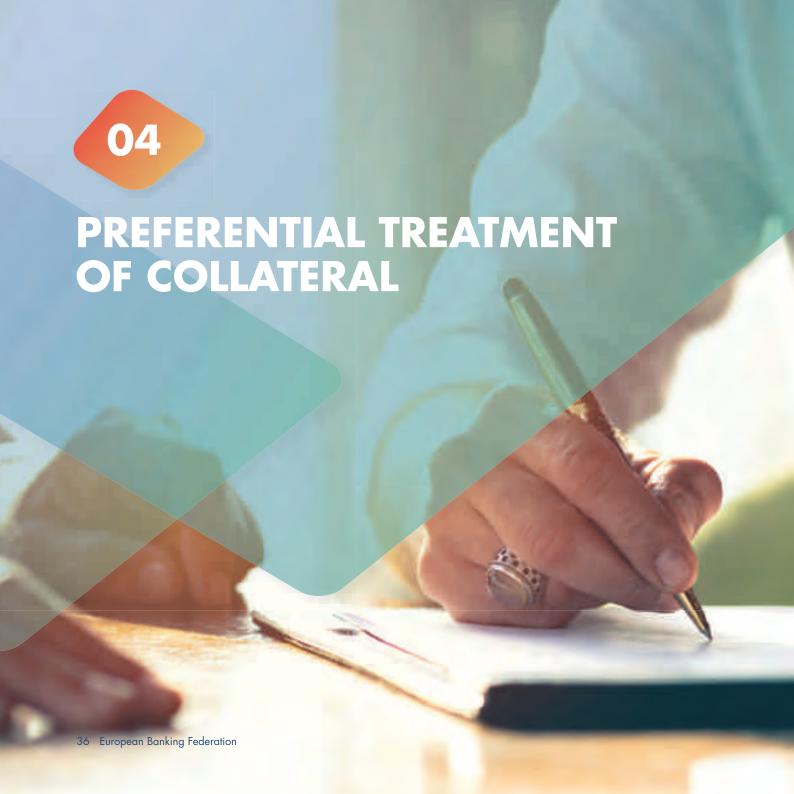
We are proposing to mirror the concept of the proposed Sustainable Finance Supporting Factor applied at the end of the usual credit risk assessment performed by the bank, within the securitisation framework (for securitisations to be sold to external investors, but not for self-securitisations). The merits of securitising a "sustainable" underlying pool should be

recognised after all the (reviewed) eligibility criteria for obtaining the STS label have been fulfilled. For the qualifying sustainable securitisation, the preferential prudential treatment should be further improved compared to the simple STS label.

We would suggest adapting the securitisation framework, notably by:

- allowing prudential deconsolidation and capital relief for the originating bank (for both synthetic and cash securitisations), on the basis of reviewed criteria to assess the Significant Risk Transfer;
- removing current disincentives in the regulatory treatment for investors (for instance in the liquidity framework and in Solvency 2). Such improvements should follow the lines of a special regulatory treatment also granted to Green Covered Bonds.

The improvement of the current securitisation framework will enable banks to securitise a pool of green loans, in order to free up the capital to be used for new green loans' financing. The proposed European securitisation mechanism for green loans would benefit from an increasing underlying volume of assets in banking balance sheets. This increase should be regarded as a common objective of banks, legislators, regulators and supervisors.



# 4.1 Acceptance of certain sustainable assets as collateral by the ECB ("eligible assets")

Furthermore, Green Bonds, Green Loans or Green securitisation should be included under the eligible assets as acceptable collateral if certain attributes are met such as the eligibility criteria suggested for the Sustainable Finance Supporting Factor (please refer to chapter 1).

# 4.2 A more attractive treatment of collateral haircut for certain sustainable assets

The ECB and the national central banks of countries using the Euro, conduct credit operations with banks and other market participants based on adequate collateral. As a safety measure and as a measure to control risks, Central Banks apply valuation haircuts (a percentage decrease) to the market value of assets mobilised as collateral. Haircuts apply when banks and other market players have recourse to normal Eurosystem credit operations as well as when they need to access Emergency Liquidity Assistance (ELA).

To foster investing in sustainable assets, the ECB and Central Banks could revise the current haircut policy and apply smaller haircuts to sustainable assets and debt instruments (no matter their type). This liquidity incentive could be useful not only during normal times (through Eurosystem credit operations) and difficult times when banks may need to access ELA, but also during bank resolutions once the long-awaited funding in the resolution mechanism is set up. In any case, it is of utmost importance that the treatment applied by different central banks is homogeneous, in order to preserve the levelplaying field.



# 5.1 Background

Tax incentives may play an important role in mobilising the shift towards sustainable actions. The objective of this chapter is to present existing examples of fiscal incentives at national level, as well as proposals for tax incentives for sustainable products, as these have a significant and direct effect in mobilising capital for the purpose of funding sustainable activities.

# **5.2** Proposals of fiscal incentives

#### 5.2.1 Direct taxes

Direct taxes have an important multiplier potential, both at the level of the investee and of the investor.

Companies that comply with strict ESG conditions and make reference to the taxonomy currently being developed at EU level Could, for example, benefit from tax exemptions and greater access to public procurement.

Analysis should be conducted to determine conditions under which subscription taxes could be waived for sustainable investment funds to support growth in sustainability.

Investors could be granted tax relief on personal or corporate income tax against a sustainable investment made, for example, in a sustainablelabelled investment fund or company. Investment income (dividends, interest, capital gains) in green companies/bonds could also be exempted from taxation up to a certain level (e.g. bond: 5 % interest tax free).

Additionally, sustainable investments could be promoted by establishing tax incentives in the Corporation Tax for the financing of such investments, for example, by increasing the limit on the tax deduction of interest expenses incurred by the borrower within the limits established in article 4 of Council Directive (EU) 2016/1164 (i.e. ATAD I) and a tax credit (on the cost of the funds) to the lender.

Eco-bonuses, which establish deductions from income taxes for work carried out to improve the energy efficiency of the building are already in place in some countries. Such tax deductions could be considered for investments in green companies/bonds or green goods (e.g. electric cars, solar panels).

It should be analysed how direct tax incentives could be linked to sustainable finance activities, business models as well as for research and development expenditure for Sustainable Finance to encourage innovation.

A preferential tax treatment on the gains from the sale of sustainable investment could also be considered.

## 5.2.2 Indirect taxes

Indirect taxes also have the potential to incentivise socially- and environmentally-oriented business models. Today the list of activities eligible for a reduced VAT rate covers a number of essential sectors and products (from a social point of view) but, for the most part, does not consider environmental aspects.

Reduced VAT rates could include more generally sustainable business models and activities. It should therefore be analysed whether the scope of reduced indirect taxes should be broadened to sustainable products and services.

Other tax incentives, that could also help boosting the sustainable activities, could consist of deductions in the transfer tax for eco-labelled real estate; in the stamp duty on mortgages on such assets, and also in bank levies (i.e. tax on deposits used to fund sustainable investments).

#### 5.2.3 Subsidies

Subsidies for green/sustainable loans, green deposits, investments in solar and wind energy, for innovation on CO2 neutral production can be introduced as an alternative to tax reliefs. Governments could grant premiums for investments in green companies/bonds (e.g. premium of 5 % of invested amount).

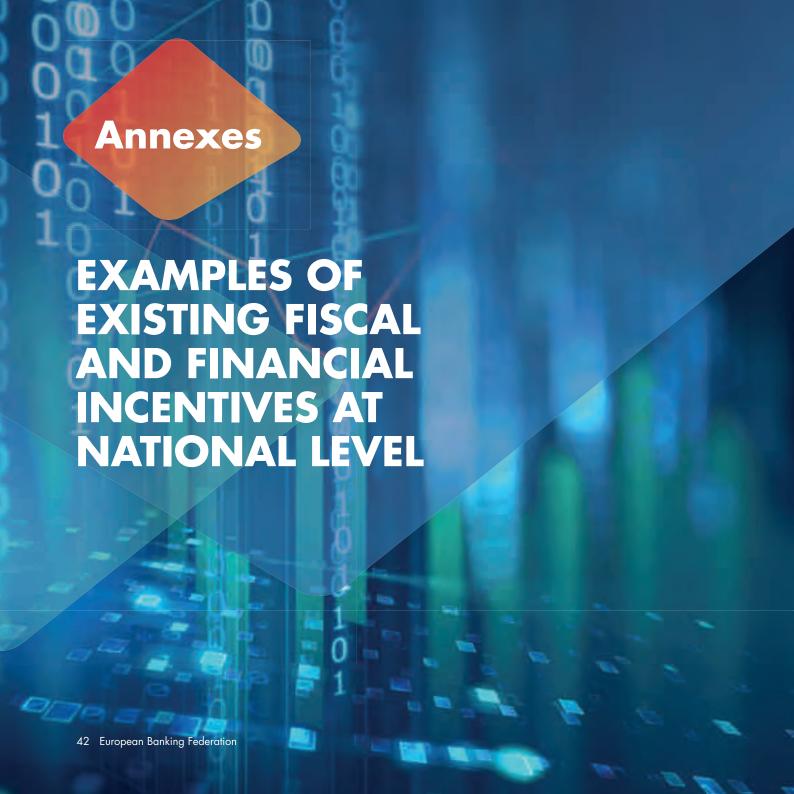
Any current subsidies for brown activities should be gradually redirected to green activities on a prospective basis to avoid disruptive effects on the economy.

All measures could also be combined or could be made conditional upon factors such as investment period (minimum 5, 10 years), invested amount (up to €10.000 annually), etc.

# 5.2.4 Carbon price

The pricing of negative externalities, such as greenhouse gas emissions, could be an effective way of increasing the bankability of sustainable economic activities. We are therefore encouraging the European institutions to support and improve the carbon emissions trading system (ETS) or otherwise, to stimulate an effective price for carbon emissions.

Adequate carbon pricing requires a reform of the ETS. The market stability reserve may help to provide businesses and investors with greater certainty regarding the carbon price. This is a step in the right direction, but more is needed for the ETS to work properly. One option is to speed up the rate at which the carbon cap is reduced, in line with the ambitions of the Paris climate change agreement. The carbon cap can also be adjusted downwards if emissions fall more quickly than expected. This would mean a supplementary policy that would not be affected by the 'waterbed effect'. Benchmarks used as a basis for allocating free emission permits should also be adjusted more quickly.



# Austria

In Austria the government provides largescale environmental funding schemes ("green subsidies") thereby channelling funds to green the economy based on a thorough due diligence process linked to environmental impact criteria.

These funding schemes cover different environmental sectors like contaminated site remediation, energy efficiency, thermal rehabilitation of buildings, energy efficiency in new buildings, renewable energy for heating, resource efficiency/renewable raw materials, water supply, water ecology, flood protection, mobility, wastewater drainage and treatment. There are different types of subsidies like investment subsidies and interest rate subsidies. The subsidy amounts usually vary between 25% and 35% of the eligible investment costs and in some cases relate to an implicit carbon price. For the efficient administration of these schemes, the Austrian government partners with a private company.



Various tax incentives have been included in the Belgian tax legislation in the past to incentivise private investments in energy saving measures. Apart from tax credits for energy saving measures for private dwellings (investments in double glass, isolation, energy efficient heating systems, solar panels etc.), an interest discount (immediately applied by the lender) and additional tax credit was granted for interest paid on so-called green loans. A tax credit also existed for the purchase of electric cars, motorcycles and charging stations. However, all such measures have gradually been cancelled as part of subsequent budget cuts and, at present, there are no dedicated "green" fiscal incentives for new investments by private individuals in place anymore (except for a tax credit for the purchase of electric motorcycles).

However, companies and self-employed persons still have the possibility to claim a tax deduction for climate friendly or energy saving investments (investeringsaftrek).

To stimulate the shift to a green(er) mobility, measures have been taken to push companies for "greening" their car fleets, mainly by coupling tax deductions and calculation of benefits in kind for company cars, to both the type of power source and the level of CO2 emissions of cars. These measures keep evolving as the car market evolves. Recent measures have also been taken to incentivise companies and their employees to exchange salary cars for cash or other means of transport ("cash for car"; "mobility budget"). Finally, several measures have been put in place to incentivise the use of bicycles by commuters (exemption of benefit in kind which can be combined with an increased reimbursement for commuting trips) as well as to stimulate carpooling.



The Danish Green Investment Fund is an independent state loan fund with the purpose of co-financing economically viable projects that facilitate and support the sustainable development of our society. Privately held companies, non-profit housing associations and public sector companies and institutions (with budgets separate from the municipalities, regions and the state) can apply for a loan from the fund. The Danish Green Investment Fund seeks to bridge the gap between traditional bank financing and equity capital. The individual loans have a maximum maturity of up to 30 years, and the fund is generally able to finance up to 60 per cent of the total costs associated with the given project.

The fund was established as part of the agreement Et Grønnere Denmark (A Greener Denmark) from 2014 and has a net capital of up to DKK 200 million as well as a stateguaranteed lending limit of up to DKK 5 billion in capital to co-finance projects within following areas:

- Environmental savings
- Renewable energy sources
- Resource efficiency

Individual projects are evaluated on the basis of four funding criteria:

- Green effect
- Healthy economy
- Scalability
- Socio economic return

#### Se more on

https://gronfond.dk/en/om-fonden/

The Danish Government has put public schemes in place to incentivize private green investments, notably through tax incentives. It is possible to make deductions from income taxation for energy renovations of private dwellings (e.g. isolation, new windows and changed heating system). Furthermore, installation/renovations of solar panels, heat pumps and geothermal energy as well as improved ventilation of private dwellings will benefit from tax credits. Prevention of climate related damage is also given tax relief.

A tax credit exits on electric and hybrid cars and electricity in charging stations for electric cars benefit from lower tax.

In addition, tax on electricity will generally be reduced due to the energy reform (Energipakken) from June 2018.



The French environmental taxation is based on a brown approach by taxing activities that have a negative environmental impact rather than a green approach giving tax incentives.

About 36 French tax measures can be considered as having an environmental impact, either punitive or incentivising, in particular the following ones:

- Domestic tax on energy products ("Taxe intérieure sur la consummation de produits énergétiques"): the amount of tax paid by taxpayers depends on the consumption volume of petroleum products, fuels and hydrocarbons. This tax represents the most important amount of environmental revenues for the French state budget. A carbon component has been added to this tax after the adoption of the French finance bill for 2014, known as the carbon tax ("Contribution Climat Energie");
- Tax contribution to the public service charges for electricity ("Contribution au service public de l'électricité"): The aim of this tax is to provide a financial contribution for the public service's charges held by operators. This contribution is paid by the final consumer and is directly withheld on electricity bills;
- Energy efficiency certificates ("Certificats d'économies d'énergie"): this mechanism aims

- at defining a level of energy savings to be achieved by energy buyers in order to avoid paying an important amount of penalties;
- General tax on polluting activities ("Taxe générale sur les activités polluantes"): this tax aims at improving the incentive to protect environment by applying the principle of "pay as you pollute". This tax is levied on businesses that store and process waste, deliver or use lubricants, emit pollutants into the atmosphere ... the amount of tax to be paid or its rate depends on the category of activities or products used;
- Tax/fee on the removal of household refuse ("taxe ou redevance d'enlèvement des ordures ménagères"): this tax aims at financing household collections.
- VAT applied on waste management
- Eco contribution: a specific amount is added to the price of electric and electronic devices, paid by buyers at the moment of the purchase;
- Bonus/penalty system for the acquisition of a vehicle, depending on the level of CO2 emitted:
- Tax credit for energy transition ("crédit d'impôt pour la transition énergétique" -

## >> France

"CITE"): Individuals can benefit from a 30% tax credit for energy transition applicable to expenses aimed at improving energy performance of homes. This tax incentive represents a cost amounting to more than 1.65 billion € in 2018;

- Tax credit for interest free loans ("prêts éco-PTZ"): French banking institutions can benefit from a tax credit for interest free loans they provide to individuals, up to €30,000, for works for energy conservation. Individuals' eligibility is not subject to a maximum amount of revenues. The amount of the tax credit is equal to the amount of interest not collected. This tax incentive represents a cost amounting to around 900 M€:
- Fees on water pollution;
- Fees on diffuse pollution,
- CO2 quota.



Taxpayers are granted tax relief if they use electric vehicles or externally chargeable hybrid electric vehicles for private transport. In general, when an employee uses a business car for private purposes, an amount equalling 1% of the car's domestic list price is treated as non-cash benefits that are subject to tax on a monthly basis. For electric vehicles and externally chargeable hybrid electric vehicles purchased or leased between 1 January 2019 and 31 December 2021, this percentage will be cut in half to 0.5%, thus providing a tax incentive for the use of such vehicles. It is currently under discussion to extend this tax incentive until 2024.

Additionally, since 2016 the Federal Office for Economic Affairs and Export Control (BAFA) gives grants for the purchase of electric vehicles ("Umweltbonus").

Furthermore, the Federal Office for Economic Affairs and Export Control (BAFA) has helped drive Germany's transition to renewable energy for many years. It is entrusted with conducting a variety of tasks to promote the efficient and economical use of energy and the further expansion of renewable energy.

Under the programmes "Energy Consulting for Medium-sized Businesses", "Energy Consulting for local authorities" and "Local consultations to save energy" Federal Office for Economic

Affairs and Export Control gives grants for consultations by qualified engineers.

A further major focus of Federal Office for Economic Affairs and Export Control's activities is to implement the programme to promote the renewable energies of the Federal Environmental Ministry. It is the Federal Office for Economic Affairs and Export Control's task to give grants for "Heating with Renewable Energy" (Marktanreizprogramm Erneuerbare Energien, MAP) and, thereby, to promote the increasing use of renewable energies in order to conserve the limited resources of fossil fuel and to make a contribution to environmental and climate protection.

In addition, there is a wide range of promotional programmes in Germany with a focus on energy efficiency, corporate environmental protection and renewable energies, which can be accessed via promotional banks such as KfW.

Besides the German government agreed on a draft law on a tax incentive for research and development (R&D) on 22 May 2019. The draft law would introduce an R&D tax incentive that is particularly intended to support small and medium-sized enterprises (SMEs). The funding shall be limited to certain R&D areas including basic research, industrial research as well as experimental development.

Accordingly, research in the field of climate protection, for example, can be tax-assisted. The law will be adopted probably by the end of the year and will apply from 1 January 2020.

On 20 September 2019, the German government adopted the Climate Action Programme 2030, a plan to ensure that Germany achieves its climate protection goals for 2030, including a reduction of greenhouse gas emissions by 55% (compared to 1990). The Programme comprises a number of measures for all relevant sectors. Significant measures include:

- New pricing of CO2 emissions caused by the building sector and by traffic and transport may be the single most important aspect of the Programme. The relevant national emissions trading system will be launched in 2021.
- The Programme calls for building emissions to be reduced by 40% by using a mix of CO2 pricing, incentives, and regulatory measures. Inter alia, the costs of refurbishment measures aimed at enhancing energy efficiency will be subsidized.
- The Programme envisages a broad package of measures in the traffic and transport sector, including CO2 pricing, the encouragement of electric mobility, and the promotion of railway

# >> Germany

transport. Air travel will be made more expensive by an increase of the air traffic surcharge and the prevention of dumping prices, and at the same time rail travel will be made cheaper by a reduction of value-added tax payable on railway tickets for longdistance travel from 19% to 7%.

The government has emphasized that the Programme will not only be sustainable, but also socially balanced. Therefore, the revenues generated by the Programme (e.g., by the new CO2 pricing) will not only be invested in climate change mitigation measures, but also passed on to citizens in order to relieve their additional financial burdens.

Further details of the Climate Action Programme 2030 will be worked out in the coming months.



# Tax incentives to support sustainability initiatives Accelerated Capital Allowances for energyefficient equipment: The Accelerated Capital Allowance (ACA) is a tax incentive scheme that promotes investment in certain energy efficient products & equipment.

- Capital allowances for gas vehicles and refueling equipment: As part of the national objective of transitioning to a low-carbon economy, accelerated capital allowances are available for capital expenditure incurred on natural-gas-propelled vehicles. For cars coming under the category "Electric and Alternative Fuel Vehicles" the accelerated allowance is based on the lower of the actual cost of the vehicle or €24,000.
- Research and Development Tax Credit: Under Irish tax law, a company can claim a tax credit of 25% of qualifying expenditure, in addition to the standard corporation tax deduction, in respect of certain expenditure incurred in carrying out R&D activities across a broad range of sectors.
- Home Renovation Incentive Scheme (HRI) was in place but was closed off on 31/12/18.
- Cycle to Work Scheme: The purpose of the Cycle to Work Scheme is to encourage more employees to cycle to and from work, or

between work places, thereby contributing to lowering carbon emissions, reducing traffic congestion and improving health and fitness levels. Under Cyclescheme, 1 bike and/or selected safety equipment up to 52% on the retail cost (average savings range from 28.5-48.5%) can be made.

- Diesel-Petrol Excise Gap: The taxation regime for vehicles of different fuel types has a significant impact on consumer decisions. The change in the tax system in Ireland has had a significant effect on CO2 emissions, as it incentivised the purchase of more efficient vehicles.
- Grants to support sustainability initiatives

## Home Energy Grants

• The Sustainable Energy Authority of Ireland (SEAI): SEAI has a range of grants for homeowners to help make homes warmer, cheaper to run, and reduce greenhouse gas emissions. Over 400,000 homes in Ireland have availed of home energy grants to date.

#### **Business Grants**

o Lighting Support Scheme for SMEs which offers a grant of up to 30% of the eligible approved costs of upgrading existing lighting.

- SEAI EXEED (Excellence in Energy Efficient Design) Certified Grant
- o The EXEED Grant Scheme provides grant support of up to €500,000 in a grant year.
- o The EXEED grant scheme is designed for organisations which are planning an energy investment project.
- Professional services to develop EXEED project proposals: Professional services, external to the Applicant organisation, deemed necessary to developing valid project proposals, are supported up by 50% of eligible costs.
- Eligible expenditure to implement EXEED processes: i) Capital associated with energy performance opportunity implementation is supported up to 30% of eligible costs. ii) Professional services associated with implementation are supported up to 30%.

## **Project Assistance Grants**

 For businesses and public sector bodies spending over €250,000 per year on your energy bills, SEAI offers grants to help them develop projects to reduce energy consumption and costs. The aim of these projects should be to achieve significant energy saving and build good procurement practices.

## >> Ireland

#### **Electric Vehicle Grants**

Grants are available for privately and commercially purchased qualifying electric vehicles.

 Carbon Management/Reduction Initiative Under the Enterprise Ireland GreenStart Carbon Management/Reduction Initiative, companies can receive grant support towards the costs of measuring the carbon footprint of their business and identify and adopt strategies to management and/or reduce company emissions.

The Carbon Management/Reduction Initiative is open to small and medium companies that are Enterprise Ireland clients or potential clients who have been trading for at least 5 years engaged in manufacturing or eligible internationally traded services. Large companies are not eligible to apply. Companies will be eligible to receive support for a maximum of 7 consultancy days to a limit of €3,150.

Support is provided towards the assessment of the energy intensity of an organisation or product which includes measuring the carbon footprint to an acceptable standard, and the use of the information gained to introduce energy reduction policies.

## **Dairy Farm Grant Scheme**

EAI provide financial support for investing

in energy efficient vacuum and milk pump technology.

## **Community Grants**

Better Energy Communities is the national retrofit initiative with grant support of up to €28 million each year. They support new approaches to achieving energy efficiency in Irish communities. Upgrades can take place across building types to reduce energy use and costs throughout the community. All projects should be community oriented with a cross-sectoral approach.

## **Research Funding**

Sustainable Energy Authority of Ireland (SEAI) coordinates and funds a range of research, development & demonstration (RD&D) activities relating to the production, supply & use of energy.

- National Energy Research Development and Demonstration (RD&D) The RD&D Funding Programme invests in innovative energy RD&D projects which contribute to Ireland's transition to a clean and secure energy future.
- Horizon 2020

Horizon 2020 is the EU's main instrument for funding research and development. SEAI supports the successful participation of Irish industry, academia & public sector bodies in

Horizon 2020 by fulfilling the role of National Delegate for Societal Challenge 3 (Secure, Clean and Efficient Energy).

There are a variety of funding mechanisms available through Horizon 2020 (e.g. individual fellowships, infrastructural awards and collaborative research projects).

- ERA-Net Smart Energy Systems Joint Call European collaboration to advance local and regional renewable energy systems. €500,000 being provided in support for Irish partners who take part in ERA-Net Smart Energy Systems. This fund is available for proposals to develop technologies, systems and solutions to enable a resilient European energy system through interconnected renewable energy supplies.
- Environmental Protection Agency (EPA) The EPA's current Research Programme 2014-2020 provides funding under three pillars -Sustainability, Climate and Water. This is facilitated through the annual EPA Research Call, which is announced between April and June each year.
- Green Bonds Ireland issued its first-ever sovereign Green Bond in October 2018. The National Treasury Management Agency (NTMA) raised €3 billion through the syndicated sale of a 12-year Irish Sovereign Green Bond.

#### 1."Ecobonus"

Taxpayers who carry out interventions that increase the level of energy efficiency of existing buildings may deduct a portion of the expenses incurred for work from personal income tax (IRPEF) or corporate income tax (IRES). The businesses can take advantage of the deduction only with reference to the buildings used in the exercise of entrepreneurial activity.

The amount to be deducted from taxes can vary from 50% to 65% of expenditure based on the characteristics of the intervention. The expenses allowed in deduction include both the costs for the work related to the energy saving intervention, and those for the professional services necessary to carry out the intervention itself and acquire the required energy certification.

## 2. "Sisma-bonus"

Who carries out interventions for the adoption of anti-seismic measures on buildings, can deduct part of the expenses incurred from income taxes. The deduction can be requested for the amounts spent during the year and can be transferred if related to interventions carried out on common parts of condominium buildings. The percentage of deduction and the rules for being able to use them are different depending on the year in which the expense is made. Higher deductions are granted when the implementation of the interventions results in a

# >> Italy

reduction of the seismic risk.

For expenses incurred from 1 January 2017 to 31 December 2021 a deduction of 50% is due, which must be calculated on a maximum amount of 96.000 euros per housing unit (for each year) and which must be divided into five equal annual amounts. The deduction is higher (70 or 80%) when from the realisation of the interventions a seismic risk reduction of 1 or 2 classes is obtained and when the work has been carried out on the common parts of condominium buildings (80 or 85%). Finally, those who buy a property in a building demolished and rebuilt in the Municipalities, in areas classified as "seismic risk 1", can deduct a substantial part of the purchase price from taxes (75 or 85%, up to a maximum of 96.000 euros).

# 3. "Green bonus for gardens, terraces, green roofs, etc."

From 1 January 2018 a "Green bonus" is available for gardens, terraces, green roofs, etc., approved in the Budget Law.

This novelty goes alongside the "Ecobonus", which rewards those who make their house more energy efficient, along with other similar tax breaks on the house, for the benefit of those dedicated to gardening, but ultimately, for the air quality and life of everyone.

## In particular:

- the 2018 Budget Law introduced a 36% deduction for the care, renovation and irrigation of the gardens and private gardens, i.e. terraces and gardens, including condominiums;
- the expenses should be documented and have a maximum limit of 5.000 euros for each housing unit; same cap for an entire condominium;
- it concerns, the green layout of private uncovered areas of existing buildings; property units, outbuildings and adjoining fences; interventions on terraces and gardens of single and condominium houses, small villas and palaces, green roofs and hanging gardens; the planting of trees and shrubs;
- green planning and maintenance can be included among the deductible expenses too.

# 4. Measures to promote electric mobility

The 2019 Budget Law introduced some points to promote the spread of electric cars, more specifically:

- electric car incentives; up to €6.000 for vehicles with a maximum price of €50.000;
- tax deduction for recharging infrastructures;

deduction in 10 years of 50% of the costs incurred for the purchase and installation of a private recharging station of up to €3.000;

• ecotax for polluting vehicles with emissions over 160 CO2 g / km.

The incentives started on March 1, 2019 and will be effective for the three-year period 2019-2021, unless extended.

National Energy Efficiency Fund The National Energy Efficiency Fund promoted by the Ministry of Economic Development, benefits from 310 million euros in guarantees and subsidised loans. Beneficiaries of the facilities are companies, ESCOs and public administrations and the following initiatives can be financed: the reduction of energy consumption in industrial processes, the creation and / or implementation of district heating and district cooling networks and plants, the improvement of services and public infrastructure, including public lighting, energy upgrading of buildings.



1) Tax allowance for sustainable forms of transport (article 129 d Luxembourg Income Tax Law).

Private citizens can apply for a tax allowance for sustainable forms of transport in the amount of:

- €5.000 for the purchase of a zero-emissions' personal vehicle that is fully powered by electricity or a hydrogen fuel cell and registered after 31 December 2016. The vehicle must seat no more than 9 people, including the driver;
- €2.500 for the purchase of a rechargeable hybrid electric passenger vehicle whose emissions do not exceed 50g CO2/km. The date of first registration of the vehicle must be after 31 December 2017;
- €300 for the purchase after 31 December 2016 of an electrically assisted pedal bicycle with a DC power output of no more than 0.25 kW, with the power supply being progressively reduced as the vehicle gains speed, and cut off entirely when it reaches 25 km/h or when stopping with pedaling;
- €300 for the purchase of a bicycle after 31 December 2016.
- 2) Assessment of the taxable benefit in kind consisting in the personal use of a company

# >> Luxembourg

car (Grand-Ducal Decree Regulation dated 23 December 2016).

- When an employee is provided with a company car for their personal use, the car is considered to be a taxable benefit in kind.
- There are two methods for evaluating the benefit in kind. One of these methods consists in a flat-rate method.
- In this respect, the benefit in kind is assessed at a monthly flat rate of percentage of the value of the vehicle when new (including options and VAT), less any discount given by the seller. The evaluation of the benefit in kind is identical for used cars. The percentage depends on the type of engine and the CO2 emission category as follows:

3) Special accelerated depreciation for some assets that protect the environment, save energy or reduce waste (article 32 bis Luxembourg Income Tax Law).

Special accelerated depreciation that may not exceed 80% of the acquisition or production cost is available for some assets that protect the environment, save energy or reduce waste, under certain conditions.

4) The Ministry of Labour, Employment and the Social and Solidarity Economy has started certifying commercial companies that comply with strict criteria around their business model, performance indicators, auditing and reporting. These social impact companies (SIS) could benefit from tax exemptions and greater access to public procurement.

CO2 emission category	Gasoline (pure or hybrid) or compressed natural gas	Diesel (pure or hybrid)	100% battery electric or hydrogen
0 g/km			0,50%
> 0-50 g/km	0,80%	1%	
> 50-110 g/km	1%	1,20%	
> 110-150g/km	1,30%	1,50%	
>150g/km	1,70%	1,80%	



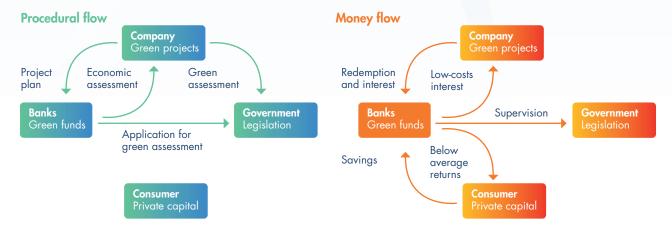
 A tax incentive scheme enables individual investors to invest in green projects that benefit nature and the environment, Individuals who invest in a green fund or save money with financial institutions practising 'green banking' receive a lower rate than the market interest

rate, however this is compensated by a tax

incentive. In return, the banks charge green

projects at a lower interest rate.

- The tax incentive works as follows: an individual investor would normally pay 1.2% capital gains tax on the amount invested, but green capital is exempted up to around €55,000 per person. Green investors also pay less income tax on their green capital. Their reduction is 1.3%, so the total tax advantage is 2.5%. This means they can accept a lower interest rate or dividend on their investment.
- The bank offers private savers and investors two options: green saving and green investment. Private individuals can choose either to put their money in a savings account or make a low risk investment. That makes no difference to the principle: the money is labelled green and has to be used by a bank for a minimum of 70% for certified green projects. The government ensures that this happens. The bank finances green projects with green money and asks for a return that works out at about 1% under the going rate. The bank is able to do this because the savers and investors are also prepared to accept a lower return on their money. The crux of the scheme is that in return, private investors receive a tax incentive on their green investment. So private savers and investors still make a good return on their money.





1) The Act of 18 December 1998 on Support for Thermo-Modernisation Projects and the Thermo-Modernisation Fund, created on the basis of provisions of the Act, determined the rules of providing to the investors (building owners or administrators) of the financial support for realisation of the thermal modernisation investments. Effective today, the Act on Support for Thermo-Modernisation and Repairs was issued in 2008.

According to this regulation, the investor is supported by the state by premium which can cover up to 20% of credit loan taken out for investment realisation. This premium is paid by Bank Gospodarstwa Krajowego (BGK - a state development bank whose mission is to support the social and economic development of Poland and the public sector in the fulfilment of its tasks) to the commercial bank crediting investment directly from the premium fund (owned and managed by BGK) as a repayment of the part of credit instalment just after the all the modernisation works are completed. The replacement of a conventional heating system by another one using renewable energy sources is included in the scope of investments described by the Law.

The scheme is available to all investors, such as owners or managers of buildings, local heat sources and local heat distribution networks. Projects eligible for support include end-

use improvements in residential and tertiary buildings, reduction of energy losses in heat distribution networks and the substitution of conventional energy sources by renewable energies. Under the "Thermo-Modernisation Programme", investors receive a premium of 20% of the loan used for implementing an eligible project upon completion of the project. The amount of the premium is 20% of the amount of credit, but not more than 16% of the costs incurred for the implementation of projects and no more than twice the projected annual energy saving cost. To be eligible, projects should fulfil specific technical criteria.

# 2) CAAP - the Clean Air Priority Program was launched in September 2018.

CAPP provides different levels of subsidy support to poor and non-poor single family building (SFB) households. CAPP is a ten-year PLN 103 billion program managed by the National Environment Protection Fund and Water Management (NFO iGW), along with the sixteen Regional Funds for Environmental Protection and Water Management. CAPP provides subsidies which decline from 90% to 30% depending on the SFB income with an investment ceiling of PLN 53,000. WFO iGW channels both subsidies and loans in one program.

3) "Thermal modernisation tax relief". In January 2019 retrofitting tax allowance in



the Law on Personal Income Tax (PIT) became effective. The Ministry of Finance launched it in order to accelerate the process of air quality improvement.

The thermo-modernisation tax relief includes the possibility of deducting 100% of expenses incurred during the implementation of the project. However, the amount cannot be higher than PLN 53,000. It is the total of expenditures in relation to all thermo-modernisation projects underway in the individual buildings owned or co-owned by the taxpayer. The limit applies to the taxpayer regardless of the number of thermo-modernisation projects carried out in each year.

The deduction applies only to the existing buildings. The duration of the venture-rewarded project cannot exceed 3 years. One can deduct an expenditure including a tax on goods and services if the tax has not already been deducted by the taxpayer under the Value Added Tax Act. If the deduction amount was not covered by the taxpayer's annual income, deductions can be made for the next six years from the end of the tax year in which the first expenditure incurred. The deduction is not deductable for the part co-financed from the funds of the Environmental Protection and Water Management or returned to the taxpayer in any other form.

The Portuguese Green Tax Reform of 2014 (under Law n.° 82-D/2014) provided for several amendments to the Portuguese tax regime to promote sustainable activities and a more sustainable behavior by the taxpayers (including a vast array of incentives to promote electric mobility).

Regarding the CIT rules, the Law created tax deductions of provisions made for environmental clean-up costs, tax advantages for natural gas powered vehicles and liquefied petroleum gas powered vehicles, reduction of the maximum depreciation tax rate applicable to solar energy equipments, and the increase of the tax deductibility for depreciations of solely electric powered vehicles, plug-in hybrid vehicles and natural gas or LPG powered vehicles.

Regarding the VAT rules, the law introduced the possibility of deducting the VAT incurred with the acquisition, manufacturing or import, lease and transformation of electric or hybrid plugin vehicles and cars or mixed use vehicles for tourism purposes, reduced VAT rates for bicycle repair services and waste removal services. Specifically for the auto sector, the registration tax was increased for some vehicles, a special tax incentive regime was established concerning the end-life destruction of cars and small goods vehicles, and exemption rules were approved for collective transport.

The Reform also provided for several tax

# >> Portugal

measures regarding urban real estate intended for activities of public water supply, sanitation and urban waste management or intended for the production of energy from renewable sources, mostly through exemptions or reduced taxes regarding real estate transfer tax (IMT) and real estate municipal tax (IMI). Further to the creation of a levy on lightweight plastic bags, the package also included tax incentives to the transport of passengers and goods by road, favourable taxation of expenses with car-sharing and bike-sharing systems and a set of tax incentives to forestry activities under the real estate municipal tax (IMI) and Stamp Tax regimes (tax exemptions).

As a result of the overarching Portuguese Green Tax Reform of 2014, and associated measures that followed, currently in Portugal, there are several incentives that play an important role in mobilising investment for a sustainable economy, namely:

- Expenses and losses related to taxable depreciation of tangible fixed assets corresponding to electro-solar or exclusively electric vessels are considered at 120% for the purpose of calculating corporate tax income.
- Preferential rates for ISV (new vehicle tax) regarding passenger cars equipped with hybrid engines, which use exclusively LPG

- or natural gas, with plug-in hybrid engines, new hybrid plug-in vehicles, passenger cars and mixed-use vehicles taxis, with exclusive consumption of LPG, natural gas or electric power, or with hybrid motors and passenger cars and mixed-use vehicles intended for taxi service, up to 4 years of use and emissions less than 160 g/km.
- Exemptions of IUC (city tax for vehicles) for non-motorized vehicles, exclusively electric or powered by non-combustible renewable energies.
- Exceptional tax incentive scheme for the destruction of end-of-life cars and purchase of new plug-in hybrid vehicles.
- Tax exemptions for national hydroelectric and thermoelectric production concessionaires and transportation and large-scale distribution of electric power, under the tax regime of state concessions regarding the national electrification policy.
- Tax exemption regarding the specific tax for oil products (ISP) for biofuels produced by small producers.
- Creation of the Environmental Funding Program ("Fundo Ambiental"), that acts as an important tool for investment in the fields of climate change, circular economy and habitat



Spain has traditionally provided some tax incentives regarding investments which protect the environment. However, currently there are no tax incentives regarding environmental activities or sustainable investments in Spanish Tax Law.

- valorization being responsible for several incentives and initiatives, such as:
- o Incentive for increasing the adoption of low emission vehicles (electric light vehicles and two-wheeled vehicles, such as electric motorcycles, electric scooters and electric bicycles).
- o Support for the acquisition and installation of fast loading stations of electric vehicles, as a way to expand the public charging system's supply and thus further promote the use of these vehicles.
- o Construction of cycle routes within the framework of "Portugal Ciclável".
- o Programa "Sê-lo Verde", to encourage the adoption of good environmental practices, innovative and with environmental, social and economic impact in major events.
- o Program for financing the electric mobility in the public administration.

Public transport tariff reduction support program, to fight the negative externalities associated with mobility, such as congestion, greenhouse gas emissions, air pollution, noise, energy consumption and social exclusion.



#### Tax incentives

Green saving: In Sweden the government appointed a committee looking into possibilities of introducing a tax incentive scheme enabling individual investors to invest into green projects (green saving) that benefit nature and the environment. The idea is to set up a green fund from which loans/credit can be provided for certified green projects. A tax reduction for the investor will be provided. The final report with a complete proposal will be presented by the latest 31 March 2020. The scheme could be set up within a bank for example.

"Green VAT": VAT is reduced from 25 to 12 % to stimulate recycling and circular economy. It covers repairing bicycles, clothing, leather goods, textiles and shoes

VAT exemption for very small businesses for turnover up to SEK 30 000 is introduced in order to stimulate own production of energy or honey from your own bees.

#### Punitive taxes

'Polluter pays' principle

Pricing carbon emissions is a way of applying the 'polluter pays' principle, in which the costs of pollution are borne by those who cause it. This ensures that emissions are reduced in the most cost-effective way, while stimulating the development and deployment of new, clean technologies.

Energy sources were first taxed in Sweden in the 1920s. A carbon tax was instituted in 1991, alongside an already existing energy tax, and it remains a cornerstone of Swedish climate policy. Over time, the carbon tax has increased in importance, contributing to a broad range of environmental and climate objectives. For example, the carbon tax provides incentives to reduce energy consumption, improve energy efficiency and increase the use of renewable energy alternatives.

The Swedish experience shows that a carbon tax can be easy to implement and administer, at low costs to authorities and operators. This is particularly true if existing revenue collecting systems, such as systems for levying other excise taxes on fuels, are already in place. Another feature of the carbon tax that reduces costs associated with its administration is that tax rates in Swedish tax law are expressed in common trade units (volume or weight).

The carbon tax is levied on all fossil fuels in proportion to their carbon content, as carbon dioxide emissions released in burning any fossil fuel are proportional to the carbon content of the fuel. It is therefore not necessary to measure actual emissions, which greatly simplifies the system. Combustion of sustainable biofuels doesn't result in a net increase of carbon in the atmosphere and hence are not subject to carbon taxation.

#### Swedish carbon tax rates

The carbon tax was introduced in 1991 at a rate corresponding to SEK 250 (EUR 24) per tonne fossil carbon dioxide emitted, and has gradually been increased to SEK 1 180 (EUR 114) in 2019 (currency conversion based on an exchange rate of SEK 10.33 per EUR). By increasing the tax level gradually and in a stepwise manner, households and businesses have been given time to adapt, which has improved the political feasibility of tax increases.

A lower tax rate has historically been applied to industry outside the EU Emissions Trading System (EU ETS), while industry covered by the system is entirely exempt from carbon tax. As of 2018, however, the industry rate outside the EU ETS is the same as the general rate.

Sweden's carbon tax generates considerable revenues for the general budget (there is no 'earmarking' of tax revenues in Sweden). General budget funds may, however, be used for specific purposes linked to the carbon tax, such as addressing undesirable distributional consequences of taxation or financing other climate-related measures.

#### **Subsidies**

for saving energy and choosing environmentally friendly and sustainable energy sources: There are a number of different subsidies provided

for through the Swedish Energy Agency. The Swedish Energy Agency provides subsidies to the municipal energy and climate advisory service that can be found in every municipality and supports the regional energy offices' work.

#### Read more here:

https://www.energimyndigheten.se/en/ sustainability/

The Agency also encourages companies to manufacture products that use less energy and are responsible for the implementation of the EU Emission Trading Scheme (ETS) in Sweden.



# **About European Banking Federation**

The European Banking Federation is the voice of the European banking sector, bringing together national banking associations from across Europe.

The EBF is committed to a thriving European economy that is underpinned by a stable, secure and inclusive financial ecosystem, and to a flourishing society where financing is available to fund the dreams of citizens, businesses and innovators everywhere.

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