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RESTORING EUROPE TO COMPETITIVENESS STRUCTURAL REFORMS TO BOOST ENERGY PRODUCTIVITY AND DRIVE GROWTH

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Europe is facing a growth and investment crisis while having to deliver the Energy Union objectives of energy security, solidarity and forwardlooking climate and energy policy. These challenges can be overcome through focusing on the mutually reinforcing objectives of boosting Europe's productivity through improved energy efficiency and putting the EU on a path to sustainable and secure prosperity.

Achieving this will require European policy makers to move beyond a piecemeal approach to improving energy efficiency and demand side management to fully integrate reforms to boost energy productivity into wider EU economic policy-making. This briefing paper explores the potential for structural reforms to achieve this and what they should be.

Summary

- Investment levels in Europe are around 15% below their 2007 peak¹. While economic activity is forecast to pick up through 2015/2016, the recovery remains fragile to date and will not be high enough to deliver a marked improvement in job creation. A focus on boosting investment in domestic infrastructure can help insulate the EU economy from the impacts of externally driven economic shocks.
- Energy efficiency and technology innovation policies have already been very effective at reversing the trend of rising energy use in the EU. Energy use in OECD countries is 60% lower than it would have been without the energy efficiency improvements of the past four decades. EU gas demand is falling due to structural changes to the European economy and energy efficiency improvements, and is currently 23% lower than its peak in 2010. But much more can be done.

¹ Communication (26 11 2014) An Investment Plan for Europe



- Finance practitioners have confirmed that there is not a lack of capital or interest in deploying capital to boost energy efficiency investment in Europe. However, the work of the Energy Efficiency Financial Institutions Group (EEFIG) concludes that there is a wide range of market, institutional, economic and financial barriers that must be overcome to accelerate investment to meet policy goals.
- > The Investment Plan is already helping to deliver increased investment in energy efficiency. However, the volume of projects coming through for financing is still far too low.
- > Estimates suggest that €60-100bn is needed to be invested annually in EU buildings to achieve Europe's 2020 energy efficiency targets yet current investments are below half of these requirements and five times lower than required to deliver 2050 decarbonisation targets for buildings².
- > There is a strong case for looking beyond the 'energy efficiency policy silo' and even the Energy Union initiative to assess how energy productivity increases can be driven through economic policy, notably through both the European Semester and Investment Plan processes. This broader approach would have extensive positive spillover effects, especially given increasing energy insecurity in the EU neighbourhood. It would strengthen and sustain the economic recovery, correct harmful imbalances, improve the conditions for investment and unleash the full potential of Member State economies.
- > As a starting point for moving forward the following is suggested:
 - Within the Investment Plan process Introducing a focus on interventions and reforms that boost energy productivity across the single market including looking again at whether State Aid reforms are needed to improve financing conditions for energy efficiency and smart energy projects supported through European Fund for Strategic Investment (EFSI) and other public funding sources; ring-fencing 50% of capacity within the European Investment Advisory Hub to support project/fund preparation and implementation in Member States; reviewing current debt and deficit restrictions in the Treaty for Stability Coordination and Governance and associated regulation to create flexibility for public spending on energy efficiency to support the delivery of National Renovation Strategies for Buildings³; and related to this, undertaking a review of the accounting treatment of public and private investment in demand side and energy efficiency to consider the case for off-balance sheet treatment.
 - Within the European Semester Country In Depth Reviews to include an assessment of levels of energy imports and the contribution made by energy imports to current account deficits as well as the potential for improvement of energy productivity levels through improving the functioning of energy markets and measures to improve energy efficiency. Consideration of the case for including improvements in average energy productivity levels as a key Macroeconomic Imbalances Indicator. Introducing

² See EFFIG Report at https://ec.europa.eu/energy/en/news/new-report-boosting-finance-energy-efficiency-investments-buildings-industry-and-smes

³ A requirement of Article 4 of the Energy Efficiency Directive

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into the Annual Growth Survey a focus on progress in addressing barriers to improving energy productivity levels.

- Within the Energy Union Ensuring the new EU Heating and Cooling Strategy moves beyond a focus on individual measures and instead treat energy efficiency and demand side management measures as part for the wider energy infrastructure; delivering markets for demand side management and energy efficiency through removing barriers to entry; improving business case for demand side through standards or obligations; addressing consumer behaviour to make it easier to reduce energy usage through reforms to the operation of the industry/consumer interface; and unlocking a single market for building-related energy efficient goods and services in the EU.
- Within Energy Efficiency Policy Revising the Energy Efficiency Directive to play a strengthened framework role to ensure that it can, along with the Energy Performance in Buildings Directive, Ecodesign Directive and related legislation, comprehensively address the wider range of specific market, institutional and economic barriers identified in the EEFIG Report. This should focus on ensuring reforms will materially improve the business case and pipeline for the demand management and energy efficiency investments.

1. The need to drive growth in an unstable international context: a new focus on energy productivity is needed

Investment levels in Europe are around 15% below their 2007 peak⁴. While economic activity is forecast to pick up through 2015/2016 the recovery remains fragile to date and will not be high enough to deliver a marked improvement in job creation. International developments add to uncertainty about the EU's economic prospects. These include volatility in commodity and energy prices; exchange rates and financial markets; persistence of geopolitical tensions in the EU neighbourhood; and reduced economic activity in emerging economies⁵. In the face of these tensions, European economic policy must focus on boosting domestic investment in infrastructure that can help insulate the EU economy from impact of externally driven economic shocks.

Given current energy security concerns, energy infrastructure investment is an obvious priority. Energy supply investments alongside roads, railways and broadband networks are well understood to be infrastructure and their importance to the EU economy widely recognised. Though less visible, energy efficiency – and notably investment in buildings – carries these same characteristics and functions and should also be included in the mix. Investment in energy efficiency investment frees up capacity in the economy for other uses, just as investment in new generation of network capacity would. In this way it increases inputs to the production of goods and services across the economy. This type of investment also

⁴ Communication (26 11 2014) An Investment Plan for Europe

⁵ European Commission (2015) Communication from the Commission to the European Parliament, the Council, the European Central Bank and the Eurogroup: 2015 European Semester: Assessment of Growth Challenges, Prevention and Correction of Macroeconomic Imbalances and Results of in-depth Reviews Under regulation (EU) No 1176/2011

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provides public services by improving energy security, reducing carbon emissions, improving health and wellbeing⁶. In addition, economic analysis of the value for money case for an energy efficiency investment programme in buildings in the UK found a high value for money ranking⁷.

In 2014 the European Commission launched its "Investment Plan for Europe". Its aim is to mobilise finance, support investment in the real economy and create an investment friendly environment. The Plan consists of: the European Fund for Strategic Investments (EFSI) a risk-sharing facility backed by the European Commission and European Investment Bank; a technical assistance facility in the form of the European Investment Advisory Hub; and a set of far reaching reforms to deliver single markets for the digital economy, energy markets and capital markets in the EU. The Investment Plan is already having a confidence-building effect in the real economy and is delivering increased investment in energy efficiency – as evidenced by the investments in industrial energy efficiency and support for a new regions-led energy efficiency financing vehicle in France.

However, the volume of projects coming through for financing is still far too low. Estimates suggest that \in 60-100bn is needed to be invested annually in EU buildings to achieve Europe's 2020 energy efficiency targets yet current investments are below half of these requirements and five times lower than required to deliver 2050 decarbonisation targets for buildings⁸.

Besides **the extent and longevity of the Investment Plan's impact will depend on what type of productive investment the plan focuses on and how that is brought about.** The Investment Plan Communication itself notes there is no single or simple answer to how we boost growth and that as such, reforms both at EU and Member State level will be needed to get investment and growth moving forward on a sustained basis⁹, exercise fiscal responsibility, and provide regulatory certainty.

The work of the Energy Efficiency Financial Institutions Group (EEFIG) has confirmed that **there is not a lack of capital or interest in deploying capital to boost energy efficiency in Europe. But there is a wide range of market, institutional, economic and financial barriers that stand in the way of an energy efficiency Europe.** As such, to get investment moving in Europe, the reforms Vice President Katainen has promised to deliver in order "create an investmentfriendly environment" will be as important as the specific projects the EFSI supports. These reforms will be key to scaling up investment in energy efficiency and demand response technology to boost Europe's energy productivity and return to competitiveness.

Against this backdrop there is a strong case for European economic policy to include a clear focus on improving the energy productivity of Europe through investing in increased levels of energy efficiency and demand side management as a key driver of growth. A dual focus on

⁶ See Frontier Economics (2015) Energy Efficiency as Infrastructure.

⁷ Cambridge Econometrics (2015) Building the Future: The economic and fiscal impacts of making homes more energy efficient http://www.energybillrevolution.org/wp-content/uploads/2014/10/Building-the-Future-The-Economic-and-Fiscal-impacts-of-making-homes-energy-efficient.pdf

⁸ See EFFIG Report at https://ec.europa.eu/energy/en/news/new-report-boosting-finance-energy-efficiency-investmentsbuildings-industry-and-smes

⁹ European Commission (2014) Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank :An Investment Plan For Europe. See Http://ec.europa.eu/priorities/jobs-growth-investment/plan/docs/an-investment-plan-for-europe_com_2014_903_en.pdf

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increasing energy productivity is needed both at an EU and a Member State level. This would have extensive positive spillover effects, especially given increasing energy insecurity in the EU neighbourhood. It would strengthen and sustain the economic recovery, correct harmful imbalances, improve the conditions for investment and unleash the full potential of Member State economies.

2. Boosting energy productivity will also boost energy security

Even before the Ukraine crisis and inception of the Energy Union as a response to growing security concerns, the EU's rising energy dependence was a concern. **Increases in oil and gas prices have driven up energy import bills in the past decade, hurting consumers and undermining EU economic recovery**. In 2012, the EU spent more than 4% of its GDP on importing fossil fuels (see Figure 1).



Figure 1: Fossil fuel imports 2008-2012 (€bn)

Source: EWEA

EU energy dependence is projected to increase even with slower demand growth¹⁰.

Anticipated rises in fossil fuel prices will see EU import bills potentially double over coming decades¹¹. Growing global demand for gas, in particular in the rapidly growing economies of China and India, will increase international competition, increasing import costs and creating risk of supply disruption and price spikes¹².

Against this backdrop **reducing energy demand and exposure would seem to be an obvious next step**. Yet while 'moderating energy demand' is cited as a key pillar of the Commission's Energy Security Strategy and the 'Efficiency First' principle¹³ seems to have really caught on, discussions about delivering the EU's Energy Union, this flagship Commission initiative looks to be increasingly focused on traditional large infrastructure play – with a strong focus on

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¹⁰ European Commission (2014) In Depth Study of European Energy Security. See https://ec.europa.eu/energy/sites/ener/files/documents/20140528_energy_security_study.pdf

¹¹European Commission (2011) A Roadmap for Moving to a Competitive low Carbon Economy in 2050. See http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52011DC0112R%2801%29

¹² I Holmes, L. Bergamaschi & N. Mabey (2014) Energy Efficiency as Europe's First Response to Energy Security. See http://e3g.org/docs/E3G_Briefing_June_2014_Energy_efficiency_as_Europe%E2%80%99s_first_response_to_energy_security .pdf

¹³ 'Efficiency First' is a principle by which energy savings and demand-side management options are prioritised whenever they are shown to be more cost-effective or to add more public value than comparable supply-side ones.



developing new gas trading partners and expanding gas interconnections¹⁴. This approach will do little to address the EU's persisting energy import dependence and declining economic resilience to volatile global prices.

It would be a major missed opportunity if the debate on how to deliver the Energy Union purely focused on increasing energy security through diversification of supply. European policy makers can seek energy security outcomes while delivering high value investments that create jobs and return the economy to growth. There is an urgent need to rebalance the Energy Union discussion on energy security towards the role of demand reduction and efficiency in re-establishing a balanced, market- based energy relationship with Europe's suppliers and strengthening European economies.

3. The forward reform agenda needs to go beyond the traditional 'energy efficiency policy silo'

Energy efficiency policies and technology innovation have been very effective at reversing the trend of rising energy use in the EU. The IEA's Energy Efficiency Market Report 2014 shows that thanks to the steady energy efficiency improvements of our cars, homes, appliances and other energy consuming equipment over the last four decades, final energy consumption is 60% lower than it would have been in IEA countries without policy interventions. More specifically in the EU, research shows that EU gas demand is falling due to structural shifts to the European economy, changing consumption patterns, and significant progress on energy efficiency¹⁵. In fact, gas demand peaked in 2010 and in 2014 EU gas demand was the lowest it had been since 1995.

Much more can still be done. There is a huge difference currently between the most and least efficient EU economies. While there are of course structural differences in the EU28 Member States this wide variation does still give a good indication of the potential to reduce the energy intensity of economies and at the same time improve their productivity and competitiveness (see Figure 2) and address growing concerns about security (see Figure 3).

Figure 2: Relative energy intensity across EU economies in 2012 (toe/€1000)

¹⁴ L. Bergamaschi (2015) Does diversification of supply routes really deliver energy security? See

http://www.euractiv.com/sections/energy/does-diversification-supply-routes-really-deliver-energy-security-312463 ¹⁵ http://e3g.org/news/media-room/europes-declining-gas-demand

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Source: E3G analysis, Eurostat data

Figure 3: Energy intensity (kg of oil equivalent/1000 EUR of GDP) and dependence on gas imports



Source: Eurostat data; E3G analysis

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4. Moving forward to reconcile security, growth and climate commitments

In addressing energy security challenges, Europe should not be rushing into costly and ineffective 'fixes' to reduce dependency on Russian gas. Instead it should develop a **'back to basics'** approach that maximises delivery of all three key aims of Europe's climate and energy policy – security, competitiveness and sustainability. **Energy efficiency and demand response**



must be at the heart of this response. For example, cost effective energy savings equal to 41% of final EU energy use are possible by 2030. The costs of this investment would be offset by net savings of €1tr-€2tr during 2020-2030.

As the recent report by the Energy Efficiency Financial Institutions Group sets out, **there will be no silver bullet to improving energy efficiency in the EU. It cannot be resolved with a single policy instrument or by a single stakeholder group.** It will require a range of actions to mobilize the millions of different actors in the EU that will build, finance and benefit from this market. It will require effort but effort that is worth undertaking given the grave challenges currently facing the EU.

A commitment is now needed from the European Commission **to systematically consider the role of energy efficiency and demand side management in delivering the goals of the Energy Union and driving growth**. Efficiency cuts across Europe's policies relating to energy, climate, finance, environment, and governance. It will require cross-cutting reforms which will sit in part within the Energy Union agenda, but also within other venues of debate including the Capital Markets Union, Investment Plan and Treaties under which the EU is governed, and ultimately will rely on implementation across the European and national legislative and regulatory landscapes.

A new systemic approach is thus needed to drive competitiveness through increased energy productivity in the EU. This will require a range of structural reforms to be delivered in Member States to ensure smarter allocation of energy resources to improve productivity, resilience to energy shocks and improve growth prospects in a sustainable way.

5. What might a set of structural reforms to improve European energy productivity look like?

Market reforms

- > Deliver a single market for energy efficient buildings, products and services Revise the Energy Performance in Buildings Directive (EPBD) to achieve greater harmonisation of building products and service standards and deliver standardisation of certification to complete the single market for energy efficient buildings, products and services. Treat buildings as an integrated part of the energy infrastructure rather than a series of individual measures.
- Improve market monitoring and oversight As part of the Ecodesign and Energy Labelling Directives, create an enhanced role for the EU in market surveillance and create a product registration database to improve market monitoring.
- Drive innovation and save energy through product standards Implement the next wave of the Ecodesign and Energy Labelling Directive reforms to bring relevant products from the commercial and industrial sectors within scope. Shift focus from products into systems and introduce a simplified dynamic performance rating system to leave greater room for long term innovation.

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- Build demand side participation in European power markets Develop functional demand side electricity markets under the Third Internal Energy Package (Electricity and Gas Directives) by creating market-based and transparent incentives for demand response that reward participation through dynamic prices, introducing harmonised measures to enable and develop demand response, elaborating clear and transparent market rules and technical requirements. Ensure that Member States adequately incorporate demand side participation into any national capacity mechanisms. Improve the business case for demand side participation by considering the use of standards, possibly subsidies or obligations. A more fundamental transformation of the energy landscape, in which the majority of consumers engage with the market, is likely to require structural reforms in the industry-consumer interface.
- Drive supply side efficiency in large scale plant Revise the Industrial Emissions and EU Emissions Trading Scheme Directives to drive industrial efficiency improvements through regulation rather than carbon price by ending the ability of Member States to opt out of imposing energy efficiency standards on plant operators as part of permit conditions.

Institutional/governance

- Strengthen strategic planning Require from Member States the development of National Energy Action Plans that consider the role of energy efficiency and demand side management in meeting 2030 climate and energy goals at least cost, including through implementing National Renovation Strategies.
- Build capacity in Member States Strengthen the Energy Efficiency Directive (EED) to require Member States to create/designate National Efficiency Delivery Authorities to deliver funding to implement National Renovation Strategies, and to have responsibility for ensuring efficiency legislation is correctly implemented and enforced on the ground as with Capital Markets – which have a single rulebook and agencies tasked with enforcement. The projects identified could then seek financing from the EFSI via the EU Investment Plan.
- Ensure planning scenarios and project valuation is consistent with EU climate and energy targets – Currently there are discrepancies between demand projections used for gas and electricity grid planning by the European Network of Transmission System Operators (ENTSOs) and those used by the Commission, which assume the delivery of EU energy savings targets and policies¹⁶. There is a need to 'energy efficiency-proof' energy projections to prevent oversizing energy infrastructure needs which would ultimately lead to asset stranding. A failure to bridge the consistency gap will lead to public objectives being missed and public money being wasted on expensive but underutilised infrastructure projects¹⁷. DG ENER with the Agency for the Cooperation of European Regulators (ACER) should be tasked with assessing the case to ensure consistency between demand projections.

 ¹⁶ E3G (2015) 'Europe's Declining Gas Demand' http://e3g.org/news/media-room/europes-declining-gas-demand
¹⁷ See J. Gaventa (2014) Energy Security and the connecting Europe Facility.

http://e3g.org/docs/E3G_Energy_Security_and_the_Connecting_Europe_Facility_110914.pdf

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- Remove uncertainty of ambition and outcomes Review the metrics currently used to measure and report energy savings and costs in the EPBD and Energy Labelling Directives and create a streamlined common metric.
- Improve monitoring As part of a review of the EPBD, create an EU Buildings Observatory to assess the investment potential for existing EU building stock and monitor progress with renovation.

Economic

- Stress test European economic resilience Introduce indicators to stress test the resilience of EU economies in resource scarce scenarios as part of the European Semester process.
- Track energy productivity in economic assessments Country In Depth Reviews to include an assessment of levels of energy imports and the contribution made by energy imports to current account deficits as well as the potential for improvement of energy productivity levels; and European Commission to consider the case for including improvements in average energy productivity levels as a key Macroeconomic Imbalances Indicator.
- Reclassify energy efficiency as infrastructure As part of the revision of the EPBD, define buildings as an integrated part of the energy infrastructure rather than a series of individual measures. Similarly, ensure that the new EU Heating and Cooling Strategy moves beyond a focus on individual measures and instead treat energy efficiency and demand side management as part of the wider energy infrastructure and as solutions to Europe's energy security concerns.
 - > Assign more appropriate discount rates when assessing cost of investment use social discount rates to assess the cost of investment.
 - Lower transaction costs through improving absorption of EU Funds Improve the absorption of EU funds by putting in place a temporary 3-year framework under which all state aid in support of energy efficiency measures would be deemed to be compatible with State Aid rules and during which aid intensity for energy efficiency is raised to 100%.
- Creating flexibility for productive investment Review current debt and deficit restrictions in the Treaty for Stability Coordination and Governance and associated regulation to create flexibility for public spending on energy efficiency to support the delivery of National Financing Strategies where it can be proven they will in 3 years start to reduce trade imbalances and boost growth; related to this, undertake a review of the accounting treatment of public and private investment in demand side and energy efficiency to consider the case for off-balance sheet treatment.

Financial

Boost the public finance offer to build capacity to build project pipelines – Ring-fence 50% of the EFSI Advisory Hub capacity to support Member States develop energy efficiency and smart energy project pipelines in order to turn National Financing Strategies into investment programmes to support pipeline development.

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- Introducing a savings test to prioritise public funds to where they deliver greatest value for money – For example, reallocate Connecting Europe Facility funds from transport to energy and create conditionality on access to those funds through requiring progress on delivering National Energy Action Plans.
- Facilitating public private financing Lower transaction costs for energy efficiency and smart energy investments through using benchmarking to assess loan performance and assigning appropriate Capital Adequacy Ratios under banks (Basel III), pension fund and insurance company regulation (Solvency II and Pensions Regulation).
- > Reducing VAT on energy efficient goods and services to reduce upfront costs.

6. Moving forward

Currently, the prospect of making significant forward progress on improving the energy productivity of the EU economy through improving the efficiency with which energy is used is being hampered by the fact many of the reforms needed fall outside the traditional remit of energy efficiency policy. The big push now being made to use structural reforms and the promise of new sources of public funding through the Investment Plan to return Europe to growth are an opportunity to start to fully address this.

If the Commission is serious about unlocking more investment and delivering 'Efficiency First' in the Energy Union more needs to be done than currently discussed. It should take inspiration from the Capital Markets Union initiative – another structural reform process, which has a stated aim of "**identifying barriers and knocking them down one by one**" to deliver a single capital market in the EU. The Capital Markets Union is a 4-year programme of reforms to better connect capital to the real economy, drive investment and create jobs.

A similar approach would work well for energy efficiency. Identifying barriers and knocking them down one-by-one to ensure that demand and supply side products and services compete on an equal footing to boost energy productivity across the EU economy. It will require ensuring adequate ambition is delivered through upcoming revisions to the Energy Efficiency Directive and related policy revisions but also looking at a wider range of market – including internal energy market - reforms plus institutional, economic and financial barriers that must be addressed within the wider economic policy space. As such demand response/management and energy efficiency need to be seen as two sides of the same coin and a fully integrated approach to unlocking their potential delivered within the Energy Union. As a starting point for moving forward the following is suggested.

Within the Investment Plan process – Introducing a focus on interventions and reforms that boost European energy productivity across the single market including looking again at whether State Aid reforms are needed to improve financing conditions for energy efficiency and smart energy projects supported through EFSI and other public funding sources; ring-fencing 50% of capacity within the European Investment Advisory Hub to support project/fund preparation and implementation in Member States; reviewing current debt and deficit restrictions in the Treaty for Stability Coordination and Governance and associated regulation to create flexibility for public spending on energy efficiency to support the financing of National

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Renovation Strategies; and related to this, undertaking a review of the accounting treatment of public and private investment in demand side and energy efficiency to consider the case for off-balance sheet treatment.

- Within the European Semester Country In Depth Reviews to include an assessment of levels of energy imports and the contribution made by energy imports to current account deficits as well as the potential for improvement of energy productivity levels through improving the functioning of energy markets and measures to improve energy efficiency. Consideration of the case for including improvements in average energy productivity levels as a key Macroeconomic Imbalances Indicator. Introducing into the Annual Growth Survey a focus on progress in addressing barriers to improving energy productivity levels.
- Within the Energy Union Ensuring the new EU Heating and Cooling Strategy moves beyond a focus on individual measures and instead treat energy efficiency and demand side management measures as part for the wider energy infrastructure; delivering markets for demand side management and energy efficiency through removing barriers to entry; improving business case for demand side through standards or obligations; addressing consumer behaviour to make it easier to reduce energy usage through reforms to the operation of the industry/consumer interface; and unlocking a single market for building-related energy efficient goods and services in the EU.
- > Within Energy Efficiency Policy Revising the Energy Efficiency Directive to play a strengthened framework role to ensure that it can, along with the Energy Performance in Buildings Directive, Ecodesign Directive and related legislation, comprehensively address the wider range of specific market, institutional and economic barriers identified in the EEFIG Report. This should focus on ensuring reforms will materially improve the business case and pipeline for the demand management and energy efficiency investments.

It's time for policy-makers to catch up with investors, who are aware of changing demand patterns and technology innovation on the demand side, and start to systematically address barriers to facilitate investment that really does deliver 'Efficiency First'. This is turn will unlock the finance needed to close the energy efficiency gap. And to boot, will boost energy productivity and accelerate a return to growth and competitiveness in the EU through energy infrastructure that is fully in line with forward-looking climate policy. E3G

Tabl DSN	Γable 1: Structural reforms to be taken forward within the Energy Union – including Energy Efficiency Policy (EE energy efficiency; DSM, demand side management; NEAPs, national energy action plans)			Type of reform			
	Goal	Specific policy	Description	Market	Institutional	Economic	Financial
	Reclassify EE as	EPBD	Define buildings as an integrated part of the energy infrastructure rather than a series of individual measures.			х	
	infrastructure	Heating and Cooling Strategy	Ensure that the strategy treats EE and DSM as part of the wider energy infrastructure and as solutions to Europe's energy security concerns.			х	
	Strategic planning	2030 governance	Require from Member States the development of NEAPs that consider the role of EE and DSM in meeting 2030 climate and energy goals at least cost.		х		
	Improve market monitoring and	Ecodesign and Energy Labelling Directives	Create an enhanced role for the EU in market surveillance and create a product registration database to improve market monitoring.	x			
NERGY	oversight	EPBD	Create an EU Buildings Observatory to assess the investment potential for existing EU building stock and monitor progress with renovation		х		
	Capacity building	EED	Require Member States to create/designate National Efficiency Delivery Authorities to ensure EE legislation is correctly implemented and enforced on the ground.		х		
	Ensure consistency in EU planning and policy-making	Better regulation / TYNDP, PCI, CEF	In particular, fix discrepancies between demand projections used for gas and electricity grid planning by the ENTSOs and those used by the Commission.		x		
	Build demand side	Market design	Develop functional demand side electricity markets by removing barriers,	х			



participation in EU power markets	initiative	leveling the playing field between demand and supply, improving the business case for demand side participation.	
Deliver a single market for energy efficient buildings, products and services	EPBD	Achieve greater harmonisation of building products and service standards, and deliver standardisation of certification to complete the single market for energy efficient buildings, products and services.	x
Drive innovation and save energy through product standards	Ecodesign and Energy Labelling	Bring relevant products from the commercial and industrial sectors within scope, shift focus from products into systems, introduce a simplified dynamic performance rating system to leave greater room for long term innovation.	х
Drive supply side efficiency in large scale plant	IED, EU ETS	Put an end to the ability of Member States to opt out of imposing EE standards on plant operators as part of permit conditions.	Х

Tabl	2: Structural reforms to be taken forward within the Investment Plan and Capital Markets Union		Type of reform				
				ket	et ional	mic	cial
LN LN	Goal	Specific policy	Description	Mark	Institut	Econo	Financ
NVESTME	Capacity building in Member States	EFSI Advisory Hub	Ring-fence 50% of the EFSI Advisory Hub capacity to support Member States in the development of EE and smart energy project pipelines that can deliver National Renovation Strategies that could seek financing from the EFSI.	х			х
AN IN	Lower transaction costs	State aid	Put in place a temporary 3-year framework under which all state aid in support of EE measures would be deemed to be compatible with State Aid rules.			Х	



Flexibility for productive investment	Treaty for Stability, Coordination and Governance	Review current debt and deficit restrictions for public spending reducing trade imbalances and boosting growth. Review the accounting treatment of public and private investment to consider the case for off-balance sheet treatment.	хх
Facilitate public- private financing	Capital Markets Union	Use benchmarking to assess loan performance and assigning appropriate Capital Adequacy Ratios under banks, pension fund and insurance company regulation.	Х
Reduce cost of energy efficient goods and services	Tax policy	Reduce VAT on energy efficient goods and services - to reduce costs of financing.	х

Та	Table 3: Structural reforms to be taken forward within the European Semester					Type of reform				
							nic	ial		
6		Goal	Specific policy	Description	Mark	Instituti	Econoi	Financ		
		Du ild an annu	Country In Donth			_				
		productivity in	Reviews	energy imports to current account deficits.			Х			
		economic	Annual Growth	Include a focus on improvements in energy productivity levels in Annual Growth	>		х			
E	5	assessments	Survey	Surveys.			~			
	201	Stress test European economic resilience	Indicators	Introduce indicators to stress test the resilience of EU economies in resource scarce scenarios.			х			

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