

THE ROAD TO

NetZero



WINTER 2022

TAGLIAPIETRA ET AL
ARGUE THAT A GAS
PRICE CAP WOULD BE
COUNTERPRODUCTIVE

FRANK ELEDERSON
CONSIDERS HOW THE ECB
WILL BE AFFECTED BY THE
EUROPEAN CLIMATE LAW

VOLZ AND SCHOENMAKER
DISCUSS THE CLIMATE
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FINANCING GAP

SUSTAINABLE DEVELOPMENT

Foreword

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elcome to the Winter edition of The Road to Net Zero, a *World Commerce Review* supplement. This publication has been prepared in response to readership demand for an overview of the steps being taken in the transition to a cleaner and greener sustainable world.

All aspects of climate action are examined, with the most respected authors providing the reader with the most comprehensive information available. Our brief is to provide all the data necessary for the readership to make their own informed decisions. All editorials are independent, and content is unaffected by advertising or other commercial considerations. Authors are not endorsing any commercial or other content within the publication. ■

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The European Climate Law and the ECB



The EU has adopted the European Climate Law. Frank Elderson considers how the ECB will be affected

A topic close to my heart – apart from the law – is the ongoing climate and environmental crises. I am glad that we have long since moved on from the time when only scientists and activists were concerned with this topic. It is now high on policymakers' agendas, as we saw at the recent United Nations Conference of Parties (COP27) at Sharm el-Sheikh, at which – along with world leaders and a wide range of policymakers and interest groups – the ECB was also represented.

I was struck by one story in particular¹. The tiny Pacific nation of Vanuatu is badly exposed to cyclones and rising sea levels. To the inhabitants of Vanuatu, climate change is a human rights issue. And, as Vanuatu's president, Nikenike Vurobaravu, stated, *"we are measuring climate change not in degrees of Celsius or tonnes of carbon, but in human lives."*

Vanuatu now plans to ask the UN General Assembly to seek an opinion from the International Court of Justice on the human rights implications of the climate crisis. That opinion could determine the rights of countries most exposed to climate change. It could also touch on the obligations of those most responsible for driving the climate crisis.

Let's now focus on Europe and the possible implications of these developments in international law for my own institution, the ECB. Under the Paris Agreement adopted at COP21 in 2015, many countries committed to the long-term goal of holding the increase in the global average temperature to well below 2°C above pre-industrial levels².

To fulfil its commitment as one of parties to the Paris Agreement, the EU last year adopted the European Climate Law³. The implications of the Climate Law are significant. Before going into why, let me first explain what the Climate Law does.

The Climate Law has three key elements. The first is its objective that the EU reduce its greenhouse gas emissions by at least 55% by 2030, with a new reduction target to be set for 2040. The EU should achieve climate neutrality by 2050 and aim to achieve negative emissions thereafter.

The second important element is to ensure that we move towards that objective. The European Commission has established a framework for assessing concrete progress and checking whether national and Union measures are consistent with the objective. It will issue regular reports on the conclusions of these assessments.

If we waiver, the costs will only increase both in a moral and financial sense. I will be even more forceful: our mandate requires us to be ready

The third and last element is to ensure that we use the most effective instruments to achieve the objective. The introduction of a European Scientific Advisory Board on Climate Change promotes the idea that all policies should be based on up-to-date scientific insights.

It is hard to overstate the importance of the Climate Law. The EU is setting the bar high. Allow me to quote what the law says about the transition to climate neutrality. It *“requires changes across the entire policy spectrum and a collective effort of all sectors of the economy and society [...] all relevant Union legislation and policies need to be consistent with, and contribute to, the fulfilment of the climate-neutrality objective while respecting a level playing field”*⁴.

We are starting to see this happen. From housing to energy and from transport to finance, the EU is introducing reforms to put Europe on track to become the first climate-neutral continent by 2050.

So how will the Climate Law affect the ECB? For me, as a member of the ECB’s Executive Board and the Vice-Chair of its Supervisory Board, this question is relevant to both our monetary policy and banking supervision tasks.

This question matters because, in the field of the environment, the ECB is a policy taker, not a policymaker. So what does the ECB need to take from the policy and objectives reflected in the Climate Law? To answer this, we first need to consider whether the ECB is bound by the Climate Law. If so, the ECB would have to take measures towards achieving the climate-neutrality objective.

There is more, though. If the ECB is bound by the law, it would also have to ensure continuous progress in enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change. Moreover, it would have to ensure that its policies on adaptation are coherent with and supportive of other such policies in the Union⁵.

That is quite a full plate. So, is the ECB bound by the Climate Law? There are definitely indications that it is. The Climate Law is addressed to *“relevant Union institutions and the member states.”* In the European Anti-Fraud Office (OLAF) judgment⁶, the European Court of Justice made it clear that, in principle, the ECB is bound by all regulations which bind the Union. There is no distinction to be made between the different institutions, bodies, offices and agencies. All are equal under the law, so to say.

However, the word ‘relevant’ is ambiguous. Does it refer to any institution, where relevant? That would mean that every EU institution should comply with the Climate Law, whenever it develops policy or takes action relevant to the objective of the law.

Or does it refer only to those institutions with competence to create policy relevant to achieving the objective of the Climate Law? The ECB would be directly bound by the law under the first interpretation but not under the second.

The Climate Law is not crystal clear on this point. It does not define ‘relevant institution’. But there are a number of strong indications that the ECB is not a relevant institution under the Climate Law. Let me explain why.

The Climate Law does not contain many specific obligations. The law sets out a destination: climate neutrality. It does not tell us how to get there. How we do so will depend on environmental and economic policymaking. This is a Union competence the ECB does not have.

There are further arguments that support this interpretation. If the ECB is deemed to be a relevant institution, then it would have to submit its policies to the Commission for assessment and the Commission would monitor progress.

That would be a fundamental change to the ECB's accountability framework. Under current law, the ECB is only directly accountable to the European Parliament and the European Court of Auditors⁷.

A final reason for this view is institutional. If the ECB were deemed to be a relevant institution within the meaning of the Climate Law, this would be an implicit acceptance that the Council of the EU and the Parliament could set additional objectives for the ECB through the ordinary legislative procedure.

However, the ECB's objectives are laid down in the Treaty on the Functioning of the European Union (TFEU)⁸, and their scope cannot be changed by secondary legislation. That would be a violation of the Treaty. Changing the ECB's objectives requires a special procedure.

The ECB is – it seems – not directly bound by the Climate Law. So, can we ignore it? Not at all. To do so would be a violation of the Treaties. Article 11 of the TFEU provides that environmental protection requirements must be *“integrated into the definition and implementation of the Union's policies and activities.”*

This imposes an obligation on the ECB to take into account and consider the objectives of the Climate Law when performing its tasks. In addition, Article 11 could be understood as supporting measures which incorporate environmental considerations as secondary aims. This means the ECB could rely on Article 11 to support the climate neutrality dimension of measures falling within its monetary policy or supervisory competences.

But it does not go so far as to establish an autonomous competence to adopt environmental measures. In addition, under Article 7 of the TFEU, the activities and policies of the ECB need to be consistent with Union law and therefore also with the Climate Law.

We have diligently assessed how these provisions of the Treaty, together with the Climate Law, affect our tasks, always being guided by and staying within our mandate. The ECB is not an environmental policy institution. The ECB is a central bank and banking supervisor. As such, let me share with you what we have done to reflect these legal requirements in the common fight against the climate crisis within our mandate.

First of all, when defining and implementing monetary policy, we need to take into account environmental protection requirements, such as the climate-neutrality objectives contained in the Climate Law. And that is what we have done. Last year the Governing Council adopted a comprehensive action plan⁹ to further incorporate climate change considerations into its monetary policy framework.

There are a number of actions to which the ECB is committed under this plan. Let me now give a very concrete example of how the ECB has taken into account climate change considerations in the context of its corporate sector purchase programme (CSPP).

Under the CSPP, the Eurosystem purchases corporate bonds for monetary policy purposes. Right now we are in the reinvestment phase which means that we are no longer increasing our portfolio but only reinvesting bonds that mature. Up until October 2022, the Eurosystem purchased these bonds in accordance with the 'market benchmark'.

However, owing to the way the corporate bond market functions, this 'market benchmark' has been criticised as leading to the purchase of a larger proportion of bonds from carbon-intensive firms.

Therefore, from October 2022, the ECB started to implement its decision to 'tilt' CSPP reinvestments to increase the share of assets from issuers with better climate performance, rather than those with poorer climate performance. There are two main reasons for this decision.

First, the ECB considered this essential in order to effectively pursue its primary objective of maintaining price stability. Given that carbon-intensive issuers are more vulnerable to physical and transition risks arising from climate change, large holdings of bonds from such companies pose higher financial risks to the Eurosystem's balance sheet, which has an impact on the implementation of its monetary policy.

Second, 'tilting' the CSPP also serves the ECB's secondary objective of supporting the general economic policies in the Union. 'Tilting' its corporate bond reinvestments towards 'greener' companies enables the ECB to align these reinvestments with the objectives set out in the Climate Law, which form part of those economic policies. This action was assessed as also being conducive, and not prejudicial, to price stability.

More generally, this measure ensures that the CSPP complies fully with the ECB's obligations under Article 11 TFEU by integrating the objectives of the Climate Law into the definition and implementation of the ECB's policies and activities.

This is one of the first steps in the ECB's climate action plan, but the ECB is also looking into other ways to take climate-neutrality objectives into account in its monetary policy – for example, through the collateral that we ask when providing liquidity to banks.

For banking supervision, there are several dimensions that I will briefly discuss. Again, we do not directly apply the Climate Law. The Climate Law does not directly relate to our tasks as a banking supervisor nor does it relate to prudential supervision. Therefore the ECB does not impose an obligation on banks to take the necessary measures to contribute to the achievement of the objectives of the Climate Law.

However, we cannot ignore it. Not only because we need to integrate environmental obligations into our policies due to Article 11 TFEU, but also since the law will have prudential implications. Therefore, the Climate Law and its consequences feature in our supervisory assessments, interactions with the banks and measures we take.

Why is that? Banks will be at the forefront of the energy and climate transition, whether they want to be or not. Their clients will face increasing hazards from climate change and environmental degradation as well as increasing regulation. Some clients will have to wind down their operations, others will be stuck with stranded assets.

A mandatory energy label has been introduced for real estate¹⁰, affecting the value of banks' mortgage portfolios. Therefore, the ECB has identified exposure to climate-related and environmental risks as a key risk driver in the Single Supervisory Mechanism (SSM) Risk Map for the euro area banking system¹¹.

In order to guide banks regarding their risk management, the ECB has published supervisory expectations in its *Guide on climate-related and environmental risks*¹². In addition, we have conducted a comprehensive review of banks' practices related to strategy, governance and risk management on climate risks – the 2022 thematic review.

We will continue to set expectations for banks to progressively manage risks on this front. These expectations are certainly not open ended. By the end of 2024, banks need to be in full compliance with all the supervisory expectations we set out in 2020.

Banks need to build their capabilities to withstand climate and environmental risks. We are happy that the Commission and the Council have acknowledged that this needs to have a foundation in prudential regulation as well. In the new banking package, the concept of 'transition plans' is important.

Under Article 76 of the proposed amendments to the Capital Requirements Directive (CRD VI)¹³, a bank's management board is required to monitor and address environmental risks arising in the short, medium and long term¹⁴.

Banks have to make sure that their business model and strategy are not misaligned with the relevant Union policy objectives towards a sustainable economy and they need to manage potential risks from such misalignments.

Article 11 TFEU, the requirement to integrate environmental requirements into the policies and activities of the Union, plays a role in supervision. The ECB has a duty to integrate the Climate Law's neutrality objectives into its supervisory policies and activities. However, we have some discretion as to how we do this.

After all, the climate neutrality objective affects the ECB's mandate in many respects and Article 11 TFEU does not prescribe how the ECB should integrate the environmental requirements. Do not expect us to act to regulate or enforce environmental policies.

We will stick to our mandate. Our mandate is to keep under control the risks that banks and the financial system are facing, and in that capacity we have to look closely at the risks that are building up in the banking sector as a consequence of the climate crisis.

Lastly, I would like to draw your attention to the work of the Central Banks and Supervisors Network for Greening the Financial System (NGFS). In November 2021 the NGFS published an important report on climate-related litigation¹⁵ which seeks to raise awareness about the growing source of litigation risk for public and private actors not convincingly supporting the climate change transition.

Understanding the risks arising from climate-related litigation is clearly crucial for central banks and supervisory authorities, and the NGFS is continuing to monitor this field carefully. It plans to publish a further report next year with an update on the many developments since 2021.

I hope I am leaving you with the right impression. The ECB is not an environmental activist, but rather a prudent realist. It is our job to point out risks, whether they are macroeconomic, macroprudential, microprudential or related to litigation, and to ensure that the financial sector takes them duly into account.

Before I finish, let's turn back to the brave fight of Vanuatu. You cannot blame Vanuatu's president for seeking to defend the rights of countries most exposed to the ongoing climate and environmental crisis. Nor can we blame him for wanting to impose obligations on those most responsible for driving the crisis.

Vanuatu's mission is a stark example what the fight against the climate crisis is about. It underpins the task we have on our side. Europe has realistically no other choice than to deliver on the objectives of the Paris Agreement.

If we waiver, the costs will only increase both in a moral and financial sense. Speaking as a European citizen, I would like us to be ready for the challenge ahead. As European central banker, supervisor and scholar of the law I will be even more forceful: our mandate requires us to be ready.

Frank Elderson is a member of the Executive Board of the European Central Bank

Endnotes

1. *"The looming legal showdown on climate justice"*, *Financial Times*, 10 November 2022.
2. Article 2(1)(a) of the Paris Agreement.
3. Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ("European Climate Law") (OJ L 243, 9.7.2021, p. 1).
4. Recital 25 of the European Climate Law.
5. Article 5 of the European Climate Law.
6. Case C-11/00, *Commission v ECB*, EU:C:2003:395.
7. Article 284(3) TFEU and Article 15.3 of the Protocol on the Statute of the European System of Central Banks and of the European Central Bank.
8. Articles 127(1) and 130 TFEU.
9. *"ECB presents action plan to include climate change considerations in its monetary policy strategy"*, press release, ECB, 8 July 2021.
10. Currently under revision. See Proposal for a Directive of the European Parliament and of the Council on the energy performance of buildings (recast) COM/2021/802 final.
11. See *"ECB Banking Supervision – Assessment of risks and vulnerabilities for 2021"*, ECB, 2021.
12. See *Guide on climate-related and environmental risks*, ECB, November 2020.
13. Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/36/EU as regards supervisory powers, sanctions, third-country branches, and environmental, social and governance risks, and amending Directive 2014/59/EU (COM/2021/663 final).
14. See also Articles 73 and 74 CRD VI.
15. *"Climate-related litigation: Raising awareness about a growing source of risk"*, NGFS, November 2021.

This article is based on a speech delivered at the Lustrum Symposium, organised by Dutch Financial Law Association, Amsterdam, 1 December 2022.

Scaling up sustainable finance

A central graphic featuring a globe of the Earth. Overlaid on the globe is a large, dark green recycling symbol (three chasing arrows forming a triangle). A small, vibrant green plant with several leaves is growing out of the top of the globe. The background is a soft, out-of-focus green.

Ulrich Volz and Dirk Schoenmaker discuss the
climate investment and SDG financing gap

Emerging market and developing economies (EMDEs) have enormous investment needs in climate mitigation and adaptation as well as other areas to attain better and more inclusive economic, social and ecological conditions and to achieve the Sustainable Development Goals (SDGs). Most countries in the Global South also face significant impacts and risks from climate change and nature loss that need to be accounted for by the financial sector.

Before COVID -19, the UN estimated that developing countries were facing an annual financing shortfall of \$2.5 trillion for advancing the SDGs and the Paris climate goals. The pandemic has widened this financing gap substantially. There clearly is a need to scale up financing for development, and to make sure that all financial flows are aligned with climate and other sustainability goals.

The trajectory to date suggests that international private capital flows are unlikely to fill the gap, despite new ambitious initiatives like the Glasgow Financial Alliance for Net Zero (GFANZ) that aim to mobilise private climate finance to emerging and developing economies.

Likewise, official development assistance (ODA) from the member countries of the Organisation for Economic Co-operation and Development's Development Assistance Committee (DAC) – which accounted for \$179 billion in 2021 (OECD 2022) – and from other donors can provide important impetus to further economic development and help to leverage private international finance, but it will not be nearly enough to meet climate investment needs and the SDGs.

To address the climate investment and SDG financing gap, mobilising domestic financial resources through the local banking system and capital markets and channelling them into domestic investments will be crucial. The successful implementation of low-emission development strategies and National Adaptation Plans can only be

achieved if domestic resource mobilisation is strengthened. Multilateral funds and development finance institutions need to complement domestic investments with grants and concessionary finance (Kraemer *et al* 2022).

Tackling climate change is a global and urgent issue, and so is the Agenda 2030. We need to join forces, and learn from each other, to scale up sustainable finance and investment in the North and the South

A new CEPR eBook (Schoenmaker and Volz 2022) brings together a group of eminent scholars and practitioners who examine the challenges and opportunities of scaling up sustainable finance and investment in the Global South, and who review existing practice.

The first part of the eBook comprises thematic chapters discussing the role of different stakeholders and instruments. The second part comprises regional and country case studies.

EMDEs savings go to developed markets

Currently, a large portion of EMDEs savings is invested – often at low or negative returns – in financial centres in advanced countries. These capital exports are often channelled back to EMDEs in the form of high-yielding, short-term debt or portfolio investments, which increase financial vulnerabilities.

Over the past decades, many EMDEs, particularly in Asia and the oil-producing Middle East, have been running current account surpluses and building up foreign currency reserves as well as overseas assets. Between 2000 and 2021, EMDEs excluding China accumulated current account surpluses of \$892 billion (\$4.8 trillion including China).

These are only net capital exports; gross capital exports are much larger. In other words, while capital should be flowing from advanced countries, where it is abundant, to developing economies, where investment needs are much larger, aggregate capital flows are going in the other direction – they are flowing ‘uphill’.

Even in countries that are net capital importers (including most countries in sub-Saharan Africa), significant amounts of domestic savings are invested abroad in safe, hard-currency assets, instead of the local economy.

There are various reasons why developing countries may export capital, including a desire to build up foreign exchange reserves to build buffers and cushion against shocks; the repayment of old debt; a diversification of investments; domestic financial and macroeconomic instability; political instability; illicit flows; and a lack of long-term investment opportunities at home due to underdeveloped capital markets.

Strengthening domestic financial resource mobilisation is key

Going forward, efforts need to be reinforced to strengthen domestic financial resource mobilisation for scaling up local climate-friendly, sustainable investments and reducing capital exports from developed to advanced economies.

A key element here is the development and strengthening of local currency bond markets. Digital technologies – including artificial intelligence, distributed ledger technologies, and the internet of things – provide an opportunity for emerging markets to develop new, innovative fundraising approaches and reinvent how capital market infrastructure and instruments are built to serve the specific financing needs of companies in emerging markets, as well as the needs of the local investor base (Chen and Volz 2021, Dikau *et al* 2022).

Fintech and blockchain-based solutions can facilitate domestic resource mobilisation for sustainable investments and at the same time improve the implementation of infrastructure projects throughout the entire life cycle by facilitating processes and enhancing transparency (Chen and Volz 2021).

The tokenisation of bonds and shares can enable citizens in emerging markets to become investors with smaller amounts of savings, while digital aggregation of these micro-investments helps to raise additional sustainable investment capital.

For instance, the Government of Kenya has raised money for infrastructure projects by issuing retail bonds that could be bought by small-scale individual investors on their mobile phone. Such approaches have the added benefit of not only unlocking more local currency capital, they also help to diversify the investor base with local investors (Dikau *et al* 2022).

This also helps to shift accountability and interest payments from often being a relationship between the government (for government securities) and foreign creditors to also becoming a relationship between the government and the national population.

Activating institutional investors and multilateral development banks

While tokenisation helps to attract a new investor base, there is also a need for aggregation to entice institutional investors, both domestic and foreign, who usually have minimum investment requirements (Schoenmaker and Schramade 2019).

Aggregation is needed as many renewable energy and energy efficiency projects are small in scale. Through standardisation and aggregation, smaller loans and assets can be bundled to reach the size institutional investors are demanding. Efforts should thus be undertaken to grow aggregation facilities to enable smaller borrowers (including corporations and municipalities) to tap capital markets.

For example, municipal finance agencies, modelled on those in Europe and North America, could be set up to borrow on wholesale markets – supported in an establishment phase by guarantees from the government or multilateral development banks (MDBs) – and channel funds to small and medium-sized cities.

MDBs as well as national development banks (NDBs) need to assume a much greater role in financing infrastructure development and in advancing a just transition to a low-carbon, climate-resilient economy than they have done so far.

To achieve the Paris climate target of limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C, high upfront investment is needed. This constitutes a big problem for EMDEs given that they face much higher cost of capital (Figure 1), a problem that is further aggravated by their climate vulnerability (Buhr *et al* 2018, Kling *et al* 2018).

Concessional finance by MDBs is even more important at a time when interest rates across the major advanced economies are rising, a large number of EMDEs are facing severe debt problems, and private capital flows to EMDEs are drying up.

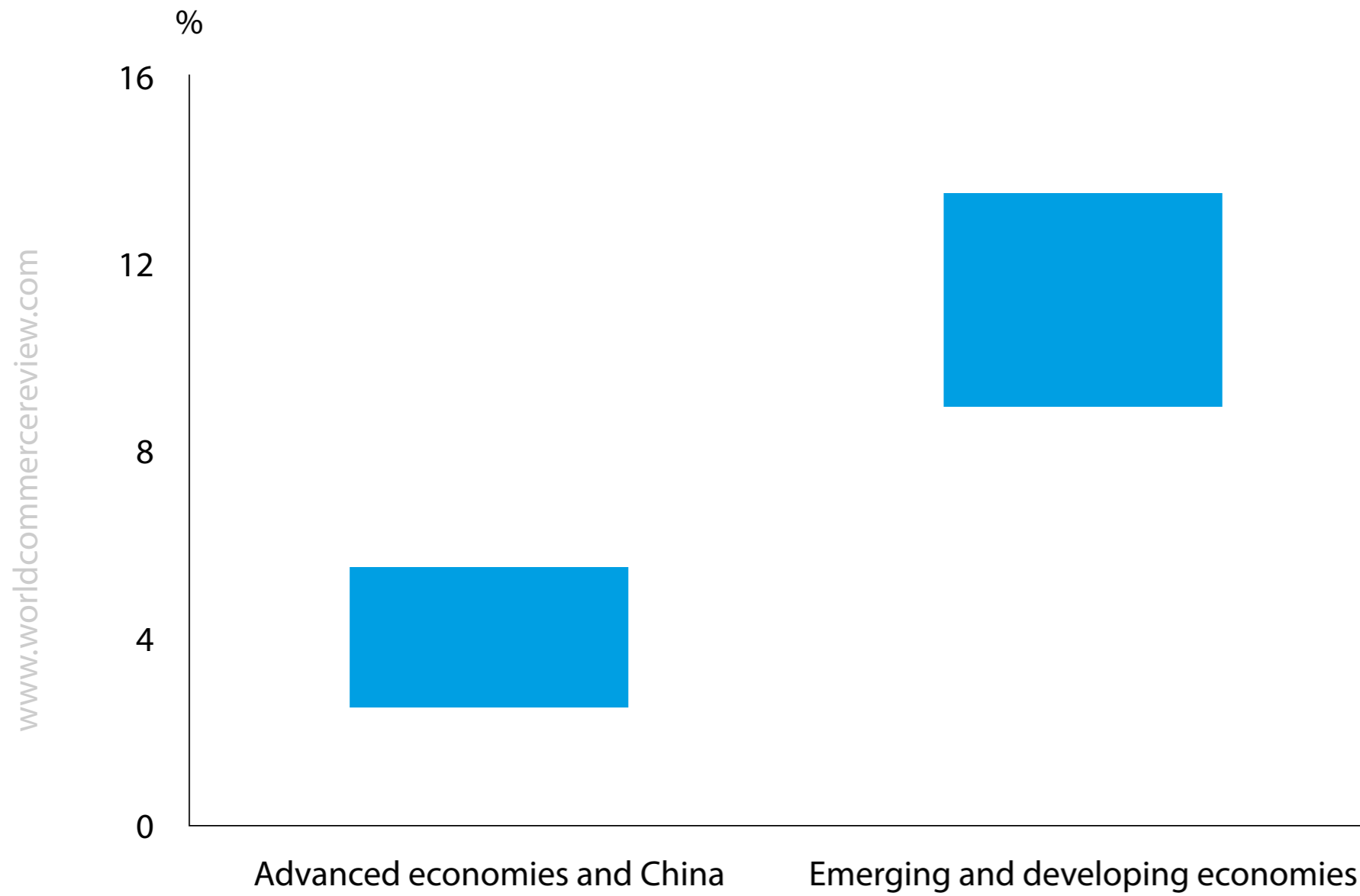
Because MDBs can refinance themselves cheaply, they can provide much-needed concessional financing to EMDE governments. Importantly, both MDBs and NDBs – whose missions should be updated with the goal of supporting a just, net-zero transition – can use a tried-and-tested method of leveraging private sector finance for development: they can issue (sustainable) bonds and borrow from markets.

MDBs in particular can absorb large amounts of private domestic and international capital at cheap rates and on-lend it to developing country governments at low rates, or directly finance projects through equity or loans.

Empowering national development banks

MDBs and development finance institutions, along with global funds such as the Green Climate Fund, the Global Environment Facility and the Climate Investment Funds, can also capitalise existing or new NDBs and make sure

Figure 1. Cost of capital for a solar PV project, 2021



Source: IEA (2021).

they have high governance standards. They can thus improve the standing and credit ratings of NDBs in capital markets and help them raise further capital in private markets more cheaply.

As mission-oriented institutions, national and international public development/climate banks can finance activities with uncertain returns and positive externalities that private finance is unwilling to fund (Griffith-Jones and Ocampo, 2018).

Importantly, key areas of development such as physical infrastructure, education, and healthcare will (and should) never generate the returns that private investors are looking for, creating a gap that NDBs and MDBs need to fill.

While domestic resource mobilisation needs to be a priority for most emerging economies, efforts should also be undertaken to attract more patient international capital. Country platforms, which are now being explored by GFANZ, could act as aggregation facilities that attract international private capital.

However, expectations need to be set straight. Whereas targeted public subsidies can be catalytic for financing development, limited amounts of ODA must be employed carefully and should not be used to de-risk private investment and guarantee double-digit returns for international banks and asset managers. If public guarantees are involved, the public should also reap the benefits and not merely take potential losses to safeguard private returns.

Getting the framework conditions right

The availability of capital at affordable cost is just one precondition to unleash the potential for long-term sustainable investment. A critical factor for any kind of private investment, be it national or international, is to get the broader framework conditions right. Besides political and macroeconomic stability, investors need predictable and transparent national laws and administrative procedures for investment operations.

It will be also important to address the looming debt crisis in the Global South that is impeding much-needed investment. Governments that are overindebted cannot invest, and countries facing a sovereign debt crisis will not attract private investment either.

Many EMDEs will need to have their debt restructured before public and private investment can resume. The G20 should therefore reform the Common Framework and turn it into a useful structure for delivering speedy and efficient debt relief for all EMDEs (and not just low-income countries) that need it.

Debt relief should not only provide temporary breathing space; it should empower governments to lay the foundations for sustainable development by investing in strategic areas of development, including health, education, digitisation, cheap and sustainable energy, and climate-resilient infrastructure (Volz *et al* 2020, 2021).

Debt relief should hence be linked to strategies that align the policies and budgets of debtor countries with the Agenda 2030 for Sustainable Development and the Paris Agreement.

Concluding remarks

Concerted efforts are needed to scale up sustainable finance and investment in the Global South. There are no silver bullets, but a host of measures that can help to generate much-needed investment in climate action and other areas needed for achieving the SDGs.

There is an urgent need to take stock of current approaches to mobilising and scaling domestic and international climate and development finance; assess the successes, limitations, and failures of these approaches; and put forward policy recommendations for development cooperation for helping partner countries in strengthening domestic financial resource mobilisation and attracting patient international capital.

Tackling climate change is a global and urgent issue, and so is the Agenda 2030. We need to join forces, and learn from each other, to scale up sustainable finance and investment in the North and the South. ■

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Does the EU need an energy crisis fund?

Simone Tagliapietra, Georg Zachmann and Jeromin Zettelmeyer argue that an EU energy fund is justified, but for different reasons than commonly assumed, with implications for the fund's design

A German plan for a €200 billion national energy emergency fund, proposed at the end of September, set [alarm bells ringing](#) across the European Union. The fear is that EU countries with more fiscal space, such as Germany, will be able to outspend others when dealing with the crisis. This could fragment the EU single market, *“setting up a race for subsidies, and calling into question the principles of solidarity and unity that underpin our European project,”* according to a [widely-syndicated article](#) by two top EU officials, internal market commissioner Thierry Breton and economy commissioner Paolo Gentiloni. Preferable, the commissioners argued, would be a *“mutualised tool at the European level”* that *“protects all European companies and citizens,”* similarly to the support instruments created during the COVID-19 pandemic.

Some of the commissioners’ concerns are valid (though they also reflect a misunderstanding of the German fund, which attempts to [pre-fund energy-crisis related expenditures](#) – most of which are not gas price subsidies – over a two year period). However, their arguments are unlikely to convince either Germany or other sceptics of EU fiscal mutualisation.

The obvious objection to mutualisation is that the purpose of building fiscal buffers – that is, reducing debt in good times – is to have more room for manoeuvre in bad times. Some (ourselves included) would prefer to create such buffers at the EU level, in the form of a much larger EU budget with a borrowing capacity. But so long as this does not exist, EU countries must have incentives to build such buffers at the national level. Redistributing fiscal resources to ensure equal treatment of households and firms in the EU after a bad shock would undermine such incentives.

This is the logic underlying the European Treaty’s no-bailout clause. It does not mean that there cannot be pan-EU solidarity with the hardest hit, but it does mean that member countries will worry mostly about their own citizens.

A different crisis

The less-obvious objection to a common energy emergency fund has to do with the nature of this crisis and, particularly, of the crisis response. In the pandemic, the responses of EU countries, such as higher spending in support of businesses and households (including to enable people to stay at home), also helped other EU countries by reducing deaths and stimulating demand for imports.

The integrity of the single market is a core economic interest of all EU countries, not least Germany, which relies on the pan-European integration of its industrial supply chains. As such, the fund could play an important role

But since higher spending is financed locally, governments, especially those with little fiscal space, would not normally take these 'externalities' into account when formulating their spending plans. As a result, a highly-integrated economy such as the EU could have seen too little crisis spending in the pandemic.

It thus made sense for the EU level to subsidise such spending, which was done in the form of grants or cheaper lending from the common [Next Generation EU](#) and [SURE](#) funds.

This crisis is different. A demand externality still exists, but at a time of high inflation, this is not necessarily a good thing (higher demand in country A could lead to even higher inflation in country B). More importantly, the instinctive national reaction to the crisis – subsidising gas and other energy consumption, as is [happening](#) in many EU countries – imparts a negative externality on other EU countries: higher energy demand in one country pushes up the gas and electricity prices in the entire bloc. In extremis, this could require more rationing.

For this reason, the cooperative, unified EU response (which [we](#), the [European Commission](#), the [Council of the EU](#) and Council President [Charles Michel](#) have all called for) should not focus mainly on EU-level fiscal support. For this crisis, 'solidarity' does not necessarily mean more spending. Rather, it means less energy consumption.

The principal measure of solidarity should not be whether an EU country is willing to support other countries financially, but whether it designs its own support plan with incentives to reduce energy consumption, whether it acts to unlock all energy supply options, and whether it will share scarce energy with neighbouring countries in case of an emergency.

Therefore the German 'gas price brake' and 'electricity price brake' – which are to be financed by the €200 billion plan – could become instruments of solidarity if they reduce German energy demand. This could be the case if they

subsidise energy prices only up to a threshold (such as 70%-80% of past consumption), while allowing the prices for additional consumption units to be determined by the market, as [proposed](#) by the expert commission tasked with designing the gas price brake (see [here](#) for a useful Twitter thread in English).

Arguments for an EU energy fund

An EU-level support fund could nevertheless be a good idea, even critically important, for three reasons.

First, there is a valid concern that if some countries are more generous than others in the support they give energy-intensive firms that compete internationally, it might not only distort the level playing field during the crisis but could improve the competitive position of these firms even post-crisis, to the detriment of EU competitors.

While a stronger fiscal position gives a country every right to be more generous to its citizens than a fiscally weaker country, it does not give it the right to inflict damage on other countries through its ability to provide state aid. State-aid rules can limit such damage, but this is not enough to maintain a (roughly) level playing field unless a minimum level of support is provided everywhere.

Second, an EU-level fiscal instrument would greatly improve the chances that support for firms is provided in a way that encourages energy savings and is consistent with the green transition. Even in countries with the best governance, distributing subsidies to firms is subject to lobbying, connections and state capture. Providing these funds at EU level will not stop these problems, but can reduce them significantly.

Third, beyond promoting incentives-friendly firm support, the fund could also be used to create incentives for EU countries to implement those policies that are essential to a cooperative and effective response to the energy crisis.

Countries would lose access to the fund if, for example, they implement policies inconsistent with meeting their energy-demand reduction commitments, or close their borders to energy trade. Additional support from the fund could go to countries that make special efforts to increase supply, for example, by increasing local gas production, authorising additional pipelines or extending the life of nuclear plants.

How to design it

A fund that meets these objectives should not simply be a replica of past fiscal stabilisation funds such as [SURE](#). Instead, it should provide support based on criteria that are carefully designed both to level the playing field among internationally active, energy-intensive firms and to encourage energy savings. This could happen in one of two ways.

One approach would be to (at least temporarily) take subsidisation of such firms out of the hands of national governments altogether. Industrial consumers that meet certain criteria – size, energy use, export orientation, perhaps value added inside the EU – would receive support from the EU-level fund.

Parallel national-level support would be forbidden at least for the duration of the crisis. Support would either avoid price subsidies altogether (for example, if it is based on past energy consumption only) or it could be based on the ideas proposed by the German expert commission on the gas price brake, which would maintain incentives to save in line with market prices.

An alternative approach would be for national governments to continue administering funds, while imposing restrictions on how they can do this (state aid rules), and providing each government with earmarked resources. Disbursement would have to be done in a way that encourages gas savings in the industrial sector rather than gas consumption.

One way to do this would be to require government to adopt criteria for state support that mirror those that would make sense at the EU level. Only governments that comply would benefit from the fund. Another way would be to link transfers from the EU fund to the actual savings achieved by each country.

The distributional implications of the fund will depend on how it is financed. If it is based on member-state borrowing in proportion to GDP or EU budget shares, it would benefit countries with a structurally high ratio of gas consumption by energy-intensive exporters to GDP, including Belgium, Germany, Italy, the Netherlands and Poland.

This redistributive effect could be neutralised by basing contributions on this ratio rather than on GDP. An additional redistributive effect, benefitting members with higher borrowing costs, would arise if the fund were to be based on common borrowing or joint guarantees.

An EU-level support fund cannot be the main pillar of the EU's response to the energy crisis. That should be a coordinated set of demand-reducing and supply-expanding policies at the national level, and an EU-wide effort to obtain better deals from external suppliers.

However, an EU fund can complement such efforts by maintaining a level playing field among energy-intensive exporters, by ensuring subsidies to these exporters are provided in a way that encourages energy savings, and by incentivising implementation of critical elements of the joint EU energy plan. The integrity of the single market is a core economic interest of all EU countries, not least Germany, which relies on the pan-European integration of its industrial supply chains. As such, the fund could play an important role. ■

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A global climate risk capital

Helen Souza discusses Bermuda's push to become the global climate risk finance capital

Bermuda is already known as the world's risk capital but now has its sights on becoming the world's climate risk capital, addressing critical needs in key markets, and closing the global protection gap while creating new economic growth opportunities.

Bermuda is unique because it is simultaneously one of the world's most significant property catastrophe (re) insurance markets, as well as a premier captive domicile and the leading global issuer of Insurance Linked Securities (ILS). The climate vertical perfectly complements Bermuda's globally recognised strengths, as well as the professional services expertise which has built up over multiple decades on the ground.

Helping to close the global protection gap

Just as Bermuda played a critical role helping high risk regions bolster their financial resilience to the rising tide of climate peril (ie. hurricane/tropical storm, wildfire, flood, and other climate-driven property risks) Bermuda will play a leading role in climate risk finance, supported by third party capital and potential new start-ups focusing on innovative technology.

The purpose of the Bermuda Business Development Agency (BDA) is to promote and protect, in collaboration with government and the private sector, sustainable and equitable economic growth, diversification, and prosperity in Bermuda. The BDA is seeking to attract new climate risk finance companies to the Island, offering exciting new career paths for Bermudians.

Bermuda's push to become global climate risk finance capital

To many, Bermuda's climate risk finance drive officially began with the Bermuda Government's climate change commitment announcements on Earth Day, April 22, 2021, and the BDA's first climate risk finance roadshow in New York City in September 2021.

Across four days, from September 27-30, the BDA delegation – led by Bermuda’s then Minister of Finance, the Hon. Curtis Dickinson, JP, MP – held 16 meetings with key decision makers from some of New York’s leading law firms, advisers, and asset managers. These firms represented revenues of \$3.28 billion and maintain offices in 54 cities worldwide.

Bermuda has built a notable wealth of climate change-related risk experts on the ground over the past three decades

After this first strong showing of support, further outreaches were held at the 26th United Nations Climate Change Conference (COP26) in Glasgow as well as in London, UK in October 2021.

As COVID-19 restrictions started to improve on-Island, the BDA held its inaugural Bermuda Risk Summit from March 14-16, 2022, attracting over 80 delegates from overseas. It was so great to get off zoom and connect with everyone again, and the immediate economic impact of the event, which had a total of 350 delegates, including lodging, transportation, food and beverage, retail and recreation was estimated at over one million dollars, and supported around 200 jobs.

The successful Bermuda Risk Summit was followed by climate risk finance roadshows in San Francisco and Silicon Valley in April, and New York in May.

Also in May, the BDA led a two-day, invite-only Bermuda Climate Summit on May 24, that drew some 150 attendees, including 70 from overseas, to discuss myriad wide-ranging climate issues, including the science of climate change, the regulatory needs of green investors, and Bermuda's leadership role in this new era.

Building on these successes, the BDA championed Bermuda's climate credentials during business development missions to London in June, Toronto in September, and Singapore in October.

To round off a busy year, the BDA is excited to be heading to COP27 in Sharm El Sheikh, Egypt in November, to provide updates on Bermuda's vision to be a global leader in climate risk finance, including developing solutions, and financial mechanisms to mitigate the impact of climate risk.

Bermuda is already an expert in climate risk finance

At all of these speaking opportunities, meetings and events, the BDA reminded climate risk finance prospects that Bermuda has built a notable wealth of climate change-related risk experts on the ground, including scientists in the public and third sectors, over the past three decades.

For example, the Bermuda Institute of Ocean Sciences (BIOS) has a rich history of supporting the (re)insurance sector; reaching as far back as 1994 when it established the Risk Prediction Initiative (RPI) a collaboration of BIOS scientists and (re)insurance experts.

In addition, Bermuda's integrated financial services regulator, the Bermuda Monetary Authority (BMA) also understands the importance of climate change issues, and in April 2021 announced the creation of an innovation and ESG subject matter team to increase its focus on climate change matters. This work progresses; in May 2022, the BMA released its most recent *Climate Risk Exposure Report*.

Committed to climate – learn about our aspirations

As an isolated 21 square mile island, located 640 miles from the closest point of land, Bermuda feels the effects of climate change first-hand in the form of increasingly frequent and severe storms, erratic rainfall, and rising sea levels.

If you would like to find out more about Bermuda's aspirations to become the world's climate risk finance capital, or want to get in touch with the BDA's dedicated concierge service to make your entry into Bermuda as smooth as possible, please contact us at info@bda.bm

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To cap or not to cap

Simone Tagliapietra, Georg Zachmann and Jeromin Zettelmeyer argue that a EU gas price cap would be counterproductive, but the reasons why it is supported widely must be addressed

Since Russia's invasion of Ukraine, Europe has taken major steps to ensure security of energy supply and help families and businesses tackle rising energy prices. Gas storage facilities have been refilled, gas and electricity demand has declined, and prices have receded from their August peaks.

However, energy prices remain extremely high compared to 2021, and the EU is divided on how best to reduce prices while guarding against new disruptions. To resolve the division, it is important to understand the reasoning on either side and to adopt a mutually-satisfactory solution. This is what we set out to do here.

For several months, EU countries have been divided into two main camps. The first camp, which includes France, Italy, Spain, Poland, Portugal, Greece and nine other EU countries, would like to cap the wholesale gas price, arguing that this addresses the problem at source, can be implemented quickly and will help reduce inflation.

The second camp, led by Germany and the Netherlands, argues that such a cap would raise demand and make it harder for the EU to attract gas supplies.

This situation is unfortunate for many reasons. It is blocking agreement on a coordinated solution and undermining EU unity in the face of Russian aggression. And it is perpetuating divisions the EU has worked hard to overcome.

The split more or less aligns with the divide between the fiscally 'frugal' north and the less-frugal rest (the main difference being that eastern EU countries are now mostly aligned with the rest).

How is this possible, given that the geography of this crisis – with Germany, Italy and some eastern EU countries among the hardest hit, and Spain and France much less affected (Figure 1) – is so different?

The answer has to do with differences in fiscal headroom, and the tensions and concerns created by these differences.

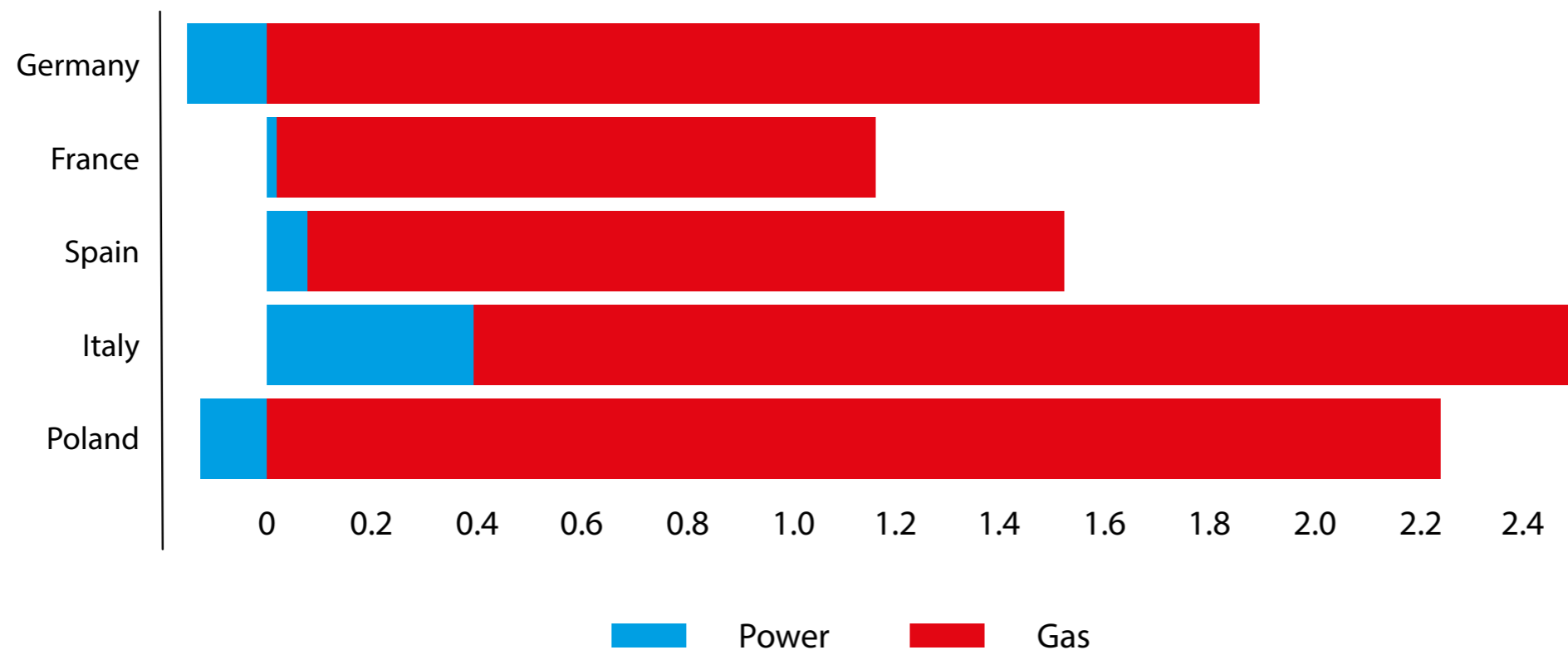
A wholesale price cap could in principle stabilise energy prices at low or even zero fiscal cost. For example, the so-called [Iberian exception](#), implemented by Spain and Portugal since June 2022, caps the price of gas as an input to electricity generation. Because gas is the most expensive ('marginal') input, the effect of the cap is to reduce

Energy prices remain extremely high compared to 2021, and the EU is divided on how best to reduce prices while guarding against new disruptions

wholesale electricity prices, the profits of electricity generators that use cheaper ('inframarginal') inputs such as renewables, and ultimately prices paid by consumers.

Gas suppliers then receive a subsidy that covers the difference between the market price and the cap, and the cost of the subsidy is passed on to consumers, who nevertheless remain better off because they subsidise only the gas input, but benefit from lower prices on all electricity consumption.

Figure 1. Change in net energy import costs (H1 2022 vs. H1 2021, as % of H1 2022 GDP)



Note: based on average wholesale prices.

Source: Bruegel based on Bloomberg, Ember, Eurostat, IEA.

The state pays nothing. Such an approach would level the playing field between countries like Germany with a lot of fiscal space, and those like France, Italy and Spain with less fiscal space, by preventing a subsidy race that would be won by Germany.

Price cap problematic

This line of argument helps in understanding the geography of the price cap debate in Europe and offers support for such a cap. However, an EU-level gas price cap is still a bad idea, for two main reasons.

First, it **makes no sense** from an energy policy point of view. While it would not necessarily raise gas demand relative to previous years (if the gas price is capped above the level in previous years), it would do far less to reduce demand than well-designed alternatives such as Germany's gas price brake, which would cap retail prices for 70%-80% of last year's consumption while exposing consumers to market prices for any additional consumption.

And as its opponents have argued, the cap might indeed harm Europe's ability to attract gas on global markets, putting at risk much-needed supply during 2023.

Second, a price cap could create more division than it prevents, by having large distributional effects, which would need to be compensated in some form. Consider, for example, the idea of applying the Iberian exception EU-wide.

Since France uses very little gas in the power sector, its consumers would pay very little for the scheme. At the same time, France would benefit through low-cost electricity imports from Germany and the Netherlands. In effect, German and Dutch consumers would be paying to reduce the electricity bills of French consumers.

That said, advocates of a price cap are right to worry about the implications for the EU level playing field of subsidies given to firms. A subsidy race could harm fiscally weaker EU countries in two ways.

First, it could suck all the gas into the countries with the most generous subsidies. This is not what Germany has in mind; its subsidies are designed to reduce German demand, not to increase it, benefiting other EU countries.

Second, even if Germany manages not to suck in gas from other countries, it has plenty of fiscal space to support its firms – unlike Italy, for example. If German energy-intensive firms emerge from the crisis largely unscathed while their Italian competitors go under, a deep wound would be inflicted on the EU, on top of the scars that remain from the euro debt crisis.

Under pressure from member states to deliver a price cap that does not have massive adverse consequences, the European Commission has proposed a [very restrained version](#) of a price cap – essentially limiting the volatility of the main gas price index.

The effectiveness and side-effects of this relatively light intervention will depend on its detailed implementation. The costs may outweigh the upside, but the proposal contains sufficient safeguards to ensure that costs do not spiral out of control. But the proposal does not stack up either economically or politically.

It might win over a few countries, but does not address the concerns that are driving the call from more than half of EU countries for a price cap. EU leaders at a 15-16 December summit will seek a deal, in follow up to an energy ministers' meeting of 24 November. What would it take to resolve differences? In our view, the EU should drop the price cap ideas and instead tackle the level playing field concern, more efficiently and transparently.

This could take the form of an EU fund to protect consumers from high gas prices, while also incentivising energy savings and accelerating the roll-out of clean solutions. Or the EU should pool its gas demand in a joint purchasing scheme to give it more bargaining power relative to external supplies.

Energy crisis fund

An **EU energy crisis fund** should support three essential policy goals.

First, it should promote energy savings. The energy crisis is fundamentally a supply crisis and therefore reducing demand is imperative. Compensation schemes should be available to gas and electricity users to give them incentives to reduce their usage.

Second, it should provide a minimum level of support to all European industry, to ensure a level playing field.

Third, the fund should be used to help accelerate the rollout of clean tech, to fully decouple Europe from Russian fossil fuels. Fast tracking of renewable electricity generation, heat pumps and energy efficiency measures will reduce demand for Russian gas, simultaneously stabilising security of supply, pushing down energy costs and decarbonising the power and heat sectors.

Deploying a common EU fund would narrow the growing gap in capital costs for clean technology investments that arises because of lending rate differentials across the EU. Prioritising renewable capacity installation – that in the short term might face equipment shortfalls – could increase the positive impact.

This would be especially the case for countries where such investment can most efficiently displace large volumes of gas, such as Italy, which still burns gas even when solar electricity could be generated for free.

Europe's energy crisis fund could be financed primarily from the [€40 billion](#) already made available by Commission President Ursula von der Leyen for energy-price support, using the leftovers of EU cohesion funds. Member state contributions or common borrowing could add to the amount.

A complementary measure to reduce gas prices would be joint purchasing of gas through the [EU energy platform tool](#). The European Commission [proposed](#) in October that joint purchasing should cover at least 15% of EU countries' storage requirements for 2023, but this is still subject to discussion by energy ministers on 24 November.

This initiative needs to be ready for the 2023 storage refilling operations, to put Europe in a better position at a time when global LNG market might be even [tighter than in 2022](#). This initiative could prevent European countries outbidding each other to secure LNG cargos, and would facilitate the allocation of scarce gas volumes across borders in case of severe supply problems. This would reduce the risk of EU energy-market fragmentation, and of subsequent energy security, economic and political fallout.

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