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## FROM EMERGENCY RESPONSE TO DELIVERING ENERGY SECURITY A WAY FORWARD FOR 2023

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The EU has weathered a difficult winter for energy security, but challenges persist. Now is the moment to pivot from emergency response to sustained delivery of renewables and energy efficiency – and avoid the risk of a shortfall in gas supplies.

Building on REPowerEU, 'Fit for 55' and emergency measures, the EU must now shift focus to the 2023–2025 timeframe. It can take concrete steps this year to reduce energy waste, prevent a gas supply shortage, and build household and industry resilience to high and volatile prices. This will have the added benefit of driving EU leadership on climate and creating a thriving home-grown clean tech economy.

### **Four actions in 2023 for the European Commission and Member States:**

1. Strengthen and scale up the sectors necessary to deliver immediate and permanent fossil gas demand reduction and boost the EU economy. For example, by investing in the heat pump and renovation sectors.
2. Set up an institutional driving force for sustained delivery, at home and internationally. Expand the focus of the EU Energy Platform and the EU–US Taskforce on Energy Security to prioritise gas demand reduction.
3. Target energy waste and reduce demand in (heavy) industry, through increased energy efficiency, improved waste heat recovery, and electrification.
4. Boost finance available for clean energy delivery by channelling private sustainable investments in addition to subsidies.



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## New normal: volatile energy prices and global clean tech competition

### High energy prices are the new normal

- > Analysts predict gas prices, on average, will remain above 2021 levels until at least 2025.<sup>1</sup> High gas prices will remain a driver of consumer energy prices.<sup>2</sup>
- > European countries have already spent over €700 billion<sup>3</sup> (around 4% of EU GDP) to shield households and industry from high energy costs. While necessary in the short term, this amount of spending is not fiscally sustainable in the medium to long term.

### Next winter will be more challenging: the EU faces a gas supply–demand gap

- > Gas supply from Russia will have more than halved compared to 2022 and is likely to stop entirely in 2023.
- > China is set to compete for more LNG supplies as its economy reopens post-COVID.
- > The IEA highlights the risk of a supply–demand gap in 2023 of 57 bcm of gas<sup>4</sup> for the EU (the equivalent of 14% of 2021 total EU demand).

### Globally, major economies are accelerating their transition to clean energy

- > The IEA predicts we are entering a new green industrial age for energy technology manufacturing – with the opportunity for a \$650bn/year global market and 14 million jobs by 2030.<sup>5</sup>
- > Clean energy companies are shifting production to North America to reap the benefits of lower energy prices and the US Inflation Reduction Act.

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<sup>1</sup> IEA, 2022, **Natural gas price assumptions, 2019–2025**

<sup>2</sup> ECB, 2022, **Macroeconomic projections, December 2022 at a glance**

<sup>3</sup> Bruegel, 2022, **National fiscal policy responses to the energy crisis**

<sup>4</sup> IEA, 2022, **How to avoid gas shortages in the European Union in 2023**

<sup>5</sup> IEA, 2023, **Energy technologies perspectives 2023**



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## Europeans want clean energy, but a delivery gap remains

### **There is economic momentum and consumer demand for clean solutions**

- > 2022 saw record wind and solar installations. The EU installed nearly 50% more solar than in 2021,<sup>6</sup> while green finance matched fossil financing for the first time.<sup>7</sup>
- > Demand for heat pumps is skyrocketing. France, Germany, Italy, and Poland are all seeing record heat pump installations.
- > 87% of EU citizens agree that “the EU should invest massively in renewable energies such as solar and wind”.<sup>8</sup>

### **Without additional action, present booms risk turning into busts**

- > Delivery is increasingly constrained, slowing projects while raising prices. Constraints include pressures on supply chains, high energy and materials costs, limited fiscal support and finance availability, and skills shortages.
- > Rising costs of living and inflation will constrain upfront spending on energy efficiency and renovations, further exacerbating the energy price crisis.

## Four priorities to shift gear from emergency to security

### **1. Strengthen and scale the key sectors for gas demand reduction**

Europe’s fastest and most affordable path out of the crisis is to build a thriving economy independent of fossil gas. Investing in key sectors that cut fossil gas demand and fostering coordination at EU level is critical to boosting markets, skills, and supply chains.

Scaling key sectors will require a skilled and knowledgeable workforce, including in manufacturing, construction, electrical and digital sectors, and administrative capacities.

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<sup>6</sup> SolarPower Europe, 2022, **EU Market Outlook for Solar Power 2022–2026**

<sup>7</sup> BloombergNEF, 2023, **Global Low-Carbon Energy Technology Investment Surges Past \$1 Trillion for the First Time**

<sup>8</sup> EU Eurobarometer, 2022, **Standard Eurobarometer 97 – Summer 2022**



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1. The European Commission should launch European Alliances for Renovation and Heat Pumps to drive the transition to comfortable and decarbonised homes.
2. Identify Important Projects of Common European Interest (IPCEIs) to strengthen the European heat pump and renovation value chains.
3. Member States should identify skills gaps in critical sectors and work with industry and unions to target interventions. Commission and Member States can use the EU Year of Skills to drive demand for and access to technical careers.
4. Member States should expand access to national advice lines (i.e. one-stop shops) and financing to support affordable deep renovations.

## **2. Set up an institutional driving force for sustained delivery, at home and internationally**

Maximising the deployment of clean energy and ensuring a structural decrease in gas demand requires political leadership and an institutional driving force. Continuity of drive will be especially important in 2024, to sustain delivery through the reconfiguration of institutions following the European elections.

In its crisis response, the EU has so far established structures that predominantly focus on the supply of gas. Most prominent is the EU Energy Platform aimed at joint gas purchases.

Internationally, the EU–US Task Force on Energy Security – though with a dual supply and demand mandate – has to date focused overwhelmingly on gas supplies while interfacing with the EU Energy Platform. LNG supplies from the US to the EU more than doubled year-on-year in 2022<sup>9</sup> and the target for 2023 is to secure an additional 50 bcm, in comparison to 2021. That is roughly the same volume that the EU could save yearly by 2025,<sup>10</sup> with additional EU action on efficiency (13 bcm), heat pumps and electrification (25 bcm), and renewables (31 bcm).

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<sup>9</sup> European Commission, 2022, **Joint Statement following the latest meeting of the EU-US Task Force on Energy Security**

<sup>10</sup> Bellona, Ember, E3G and RAP, 2022, **EU can stop Russian gas imports by 2025**



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Now is the time to put an equivalent focus on demand reduction. These taskforces must expand to prioritise the delivery of REPowerEU objectives beyond gas diversification.

1. The EU Energy Platform’s mandate should be expanded as quickly as possible to:
  - > Create a place for Member States to coordinate and pool demand for heat pumps and insulation needed for the next few years, to scale up production and supply chains while driving down costs. This should start with demand for public buildings, in particular social housing.
  - > Monitor progress towards closing the gas supply-demand gap in line with REPowerEU goals to reduce gas demand by 52% by 2030.<sup>11</sup>
  - > Identify key delivery risks and opportunities for the EU and Member States to strengthen demand reduction. Report these to the European Council and Energy Council before the September 2023 State of the European Union Address.
2. The EU–US Taskforce on Energy Security, as well as other bilateral energy partnerships, must afford demand-side solutions equivalent status to gas supply cooperation.
3. Task ENTSO-E and national transmission system operators to develop “grid security plans”. These should set out how to ready grids to operate under the faster deployment of renewables, heat pumps and electrification of industry observed in EU markets now, and put them on track for a net-zero power sector by 2035.

### 3. Target energy waste and reduce demand in (heavy) industry

The manufacturing industry drove gas use savings in 2022. However, data suggests that a significant share of these savings resulted from production curtailments<sup>12</sup> or fossil fuel switching<sup>13</sup> – rather than structural changes. Much of the potential in industry for sustained gas demand reduction and savings from avoided energy waste remains untapped. Energy consumption can be reduced by around 20%<sup>14</sup> through increased efficiency and improved waste

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<sup>11</sup> E3G, 2022, **Repowering towards EU Gas Demand Reduction**

<sup>12</sup> ICIS, 2022, **EPCA '22: European shut ammonia production unlikely to return – analyst**

<sup>13</sup> S&P Global, 2022, **Global gas-to-oil fuel switching to jump 80% as European, Asian gas prices soar**

<sup>14</sup> sEnergies, 2022, **Beta Version of the model IndustryPlan**



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heat recovery. Over 50% of fossil gas use in industry can be electrified<sup>15</sup> by heat pumps and electric boilers replacing low- to medium-temperature heat processes.

Ongoing legislative reviews, including momentum for the Green Deal Industrial Plan and the revised State Aid Temporary Crisis and Transition Framework, should be leveraged to condition the decarbonisation of industry and reduce wasted energy.

1. The Commission and Member States should make receiving (emergency) state aid conditional on industry taking energy-saving measures – with a payback period of ten years or less.
2. Introduce phase-out requirements for fossil-based low- to medium-temperature industrial processes – for example by revising the Ecodesign for Sustainable Products Regulation or the Industrial Emissions Directive.
3. Member States should conduct analyses to identify latent potential for gas savings in the industry at the national, sectoral and facility levels.

#### **4. Boost finance available for clean energy delivery**

The EU has one of the most advanced regulatory frameworks on climate change and has proven to be a credible and reliable global player. However, the EU's clean energy sector will not be built on subsidies alone and will require a significant level of investment from the private financial sector.

The EU must deliver on its sustainable finance agenda to channel private sustainable investments where they are needed most to achieve the European Green Deal's ambitions. Harmonising sustainable corporate governance and disclosure rules will also help boost EU capital markets and facilitate access to private finance across all Member States.

Additionally, the EU should target greater coherence and synergies in the deployment of public and private finance. This could be done by further leveraging public funding through co-financing models to incentivise private investments in clean energy projects.

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<sup>15</sup> Agora Energiewende, 2022, **Regaining Europe's Energy Sovereignty**



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1. Member States should advance discussions on European fiscal policy to give more fiscal freedom to national governments to invest in their green transition.
2. The European Commission should develop a coherent and robust transition finance framework incentivising both the financial sector and businesses to develop transition pathways that match the objectives of the European Green Deal<sup>16</sup>.
3. The European Commission should deliver:
  - > An ambitious set of corporate sustainability reporting standards.
  - > Support to the European Financial Reporting Advisory Group (EFRAG)'s work on sectoral and SME-specific standards.
  - > Proposals on a framework for Environmental Social and Governance (ESG) ratings.
4. Member States can create incentives for banks to engage in buildings decarbonisation by making Mortgage Portfolio Standards mandatory in the Energy Performance of Buildings Directive (EPBD) negotiations.

## About E3G

E3G is an independent climate change think tank with a global outlook. We work on the frontier of the climate landscape, tackling the barriers and advancing the solutions to a safe climate. Our goal is to translate climate politics, economics and policies into action.

E3G builds broad-based coalitions to deliver a safe climate, working closely with like-minded partners in government, politics, civil society, science, the media, public interest foundations and elsewhere to leverage change.

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<sup>16</sup> E3G, 2022, **Achieving a transition finance framework in the EU**