Who are we?

BUSINESSEUROPE’s members are 41 central industrial and employers’ federations from 35 countries, working together to achieve growth and competitiveness in Europe. Its mission is to strengthen the competitiveness of the European economy in order to increase prosperity and opportunities for all Europeans.

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Foreword

The stakes for European companies are very high in the new energy, climate and competitiveness package for the 2020-2030 period. The European Union has committed to strengthening its industrial base by increasing the share of industry in overall GDP from 15 to 20% by 2020. This industrial growth agenda requires a rethink of our energy and climate policies to transform them into true industrial growth drivers. With unemployment at record levels and increased industrial competition from emerging countries and the United States, we have to tackle the energy cost challenge head on.

Rebalancing energy and climate policies to tackle competitiveness is central to this debate. Energy costs have risen to unprecedented levels in Europe at a time when our main competitor, the United States, is benefitting from increasingly lower energy costs. There is no doubt that climate policy will remain a cornerstone of our energy strategy. But Europe needs to combine climate action with cost efficiency by making the Emissions Trading Scheme the primary tool to reduce industrial emissions across Europe. In addition, Europe needs to put more effort into delivering an ambitious international climate agreement. Europe alone cannot solve this global challenge, the US, China (which together account for more than double our emissions) and other major economies will need to make binding reduction commitments as well.

Reducing energy costs will be a major challenge for Europe which does not have as much indigenous energy resources as its major competitors. Through a range of coordinated actions, Europe can significantly improve its energy policy to make it more efficient. In addition to a better climate policy, Europe has to diversify its energy supplies and be more positive towards shale gas. Cooperation between Member States also needs to drastically improve to build a common energy market. This can enhance security, efficiency and the environment while also lowering energy costs. For this, Europe will need a dedicated consultation mechanism to foster greater cooperation between our energy systems. We are not asking for more Europe, we want better Europe for our energy needs.

This is an overarching energy policy vision that we put forward to policy makers to keep our industry competitive while addressing the challenge of security and climate.

Emma Marcegaglia
President
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BUSINESSEUROPE calls for a cost-competitive and coordinated energy and climate policy for 2030, stimulating industrial growth and job creation. The renewed strategy should be articulated around the following seven main recommendations:

1 **Establish competitiveness and security of supply targets**
   Europe has to put cost-competitiveness, security of supply and climate objectives on an equal footing. It must closely monitor energy competitiveness and security of supply to make sure that the three objectives are well balanced. To ensure political commitment and actions, targets to address the energy price differential with major competitors and to ensure energy security should be introduced.

2 **Set a 2030 emissions reduction target**
   The EU should set a single 2030 emissions reduction target to incentivise investments in low-carbon and energy-efficient technologies. Due to their overlapping scope with the EU ETS, the EU targets for energy efficiency and renewable energy sources should not be continued after 2020.
   BUSINESSEUROPE strongly supports global efforts to reduce emissions and urges governments and the European Commission to achieve an ambitious international climate agreement in 2015. Whatever the outcome of the international climate negotiations in 2015, the EU should set a binding 2030 emissions reduction target. However, to avoid the negative consequences of unilateral decisions, the EU should take into account the outcome of the negotiations on this agreement when deciding on the most appropriate level of ambition.

3 **Maintain the ETS as the cornerstone of EU climate and energy policy**
   A strong ETS should be the main instrument to reduce emissions for industry and other covered sectors and to promote investments in low carbon technologies. It should provide a common regulatory framework for both the power sector and covered energy intensive sectors. However, to address the loss of competitiveness of energy-intensive industry, accompanying evidence-based measures for carbon leakage will have to be strengthened.
   Achieving further improvements in the non-ETS sectors will be crucial, notably high energy efficiency potential in buildings remains untapped.

4 **Phase out support for the market deployment of energy produced from renewable sources**
   Renewable and low carbon technologies offer interesting market perspectives for many European companies. However the energy prices impact of current support schemes is not viable for the EU’s economy. Support for the market deployment of renewable should be progressively phased out to allow the market to determine energy choices. A transitional support structure should be designed taking into account the expected technological progress and decrease in production costs for different renewable technologies. After the transition period, support should be focused on the early stages of technology development.

5 **Provide enabling R&D&I conditions for technology development**
   A strong, coordinated and focused European energy and low-carbon technology programme is urgently needed. It should upgrade the existing research, development, demonstration and innovation (R&D&I) frameworks at EU and national level.

6 **Strengthen energy policy coordination among Member States**
   The EU’s ability to act in the field of energy policy needs to be strengthened through establishment of a mandatory process of consultation among Member States before national decisions with potentially wide consequences for neighbouring markets are taken.
   Fostering the completion of the internal energy market through full implementation of the Third Energy Package and the development of energy infrastructure as well as cross-border electricity and gas interconnection must be a priority.

7 **Diversify EU’s energy supply sources**
   Europe needs determination to explore and exploit, in a sustainable manner, potentially highly advantageous unconventional energy resources such as shale gas. It should also develop a much more robust external energy strategy by using its trade, diplomatic and development policy resources to improve relations with major suppliers.
II. Context and objective

On 27 March 2013, the European Commission published a green paper to start discussing the forthcoming 2030 energy and climate policy. This policy framework will influence Europe’s energy and industrial outlook for decades and thus will be the basis for companies to make informed choices about their investments. A smart design of the EU’s post-2020 energy and climate policy will be key to strengthen competitiveness and to facilitate re-industrialisation of Europe. This paper provides BUSINESSEUROPE contribution to this strategic debate.

The EU has an excellent track record in environmental protection also thanks to the innovation capacity of its businesses. This has enabled technological progress and job creation also in new markets. In the period 1990-2010, the EU-27 reduced its emissions by around 17% compared with 1990 levels while the EU-27 GDP increased by 41%. Today, many EU industrial sectors are global leaders in terms of energy efficiency and emissions reduction. Moreover, many European companies successfully have secured significant global market shares for energy technologies and low-carbon technologies. Past experience shows that European business is able and willing to gain a competitive edge over competitors while progressively improving its environmental footprint. This process must be supported by the right policy and regulatory framework at European and national level.

Europe will be successful in designing the 2030 framework if it properly considers three objectives: security and stability of energy supply; cost-competitive energy prices to enable companies to compete globally; environmental sustainability to tackle negative externalities while taking advantage of opportunities to develop new technologies.

Since 2008, Europe has focused energy and climate policy on environmental sustainability. However, major internal and international developments require Europe to “re-balance” the three main objectives. Firstly, the financial and economic crisis has heavily affected Europe and confirmed the important role that industry must play to drive growth, jobs and prosperity. Secondly, the US is profiting from comparatively low energy prices, mainly due to the extraordinary progress achieved in the exploitation of shale gas and oil. This puts the US economy, and in particular its energy-intensive sectors, in a strong position to compete with Europe to attract new industrial investment. Thirdly Europe has to take a critical look at lessons learned from the current energy and climate policy.

With this paper, BUSINESSEUROPE is proposing concrete solutions to improve the EU energy and climate policy and to establish the right conditions for supporting investments and growth of energy intensive sectors, technology providers and energy companies in Europe.

The first section summarises some analytical work carried out on the current EU energy and climate policy commonly referred to as the “2020 energy and climate framework”. On the basis of current experience, four challenges need to be addressed in the future EU energy and climate policy which we will refer to as the “2030 energy and climate framework”: high energy prices; the lack of coherence in climate policies; the fragmentation of the EU internal energy market and the lack of a global climate agreement.

The second section outlines policy recommendations for the 2030 energy and climate framework taking into account the challenges identified in the current framework and important international developments and with the ultimate aim of reaching the three main objectives in the most cost-effective way.
III. Four Key Challenges

Analysing the current EU policy framework for energy and climate and major international developments, we identified four main challenges to improve the competitiveness of business operating in Europe, security of supply and environmental sustainability: high energy prices in the EU, lack of coherence in EU policies, fragmentation of the EU internal energy market and the lack of a global climate agreement. The following section briefly analyses these issues highlighting their causes and consequences.

Unless specified, facts and figures presented in this section are based on a recent study by Frontier Economics for BUSINESSEUROPE.

High energy prices in the EU

A reliable and affordable energy supply is essential for maintaining a competitive industrial sector and value chain in Europe. Energy is an important cost factor for a wide range of industrial sectors; in energy-intensive sectors, energy costs represent up to 40% of production costs.

The gap in energy prices with global competitors such as the USA is widening

The difference in energy prices with direct global competitors significantly impacts the competitiveness of many European manufacturing sectors.

The electricity price for industrial consumers varies substantially across the EU and ranges between 7 and 13 EUR cent/Kwh in continental Europe (corresponding to about 9 to 17 USD cent/Kwh) in the second half of 2011 (Figure 1).

A similar variation in industry retail prices can be found within the USA. However, in US states with a strong industrial activity, the average industrial electricity price is significantly lower, around 6 USD cent/kWh in 2012.

Over the last ten years the gap between industrial electricity prices in the USA and in the EU widened significantly (Figure 2).

A similar trend can be observed in the end-use gas prices for all industrial customers in the EU and the USA with American prices more than four times lower than in Europe in 2012 (European Commission...
contribution to the European Council of 22 May 2013). Among many, two major factors responsible for this divergence are a stronger gas price linkage in Europe to crude oil prices and the discovery and production of shale gas in the USA, in combination with the constraints on gas exports to world markets.

At the same time, production of fuels from unconventional crude oils is rising in North America (shale oil in the US and oil sands in Canada), determining lower prices for transportation of industrial products and goods.

The divergence of energy prices for industry in the EU and the USA can be explained to some extent by the availability and exploitation of natural resources. However, add-on costs by policy instruments such as carbon pricing, energy taxation, renewable policies in Europe also played a significant role as well and are analysed below more in detail.

National support schemes for renewables in Europe affect the price of energy

The promotion of renewable energy sources has had a significant impact on the electricity price in the EU. The EU has a binding target of a 20% share of renewables in energy production to be reached by 2020, which is translated in binding national renewable targets. Achieving this target will require EU Member States to collectively produce 34% of their electricity from renewable sources.

National support schemes have been put in place to incentivise investment in renewables by subsidising electricity production. In 2011, the net support for electricity produced in the EU from renewables reached about 37 EUR billion or about 114 EUR/MWh for the electricity produced with renewables (Figure 3). In the same year, costs due to renewables promotion to be paid by the average final electricity consumer over all EU Member States were about 13 EUR/MWh.

In 2020, the net support (payments to renewable electricity above wholesale prices) is expected to increase to about 50 EUR billion, corresponding to about 30 to 50 EUR/MWh on average for all technologies and across Member States. Costs to be paid by the average final electricity consumer across Member States will be about 16 EUR/MWh.

The EU Emission Trading Scheme will progressively increase power prices

The EU Emission Trading Scheme (EU ETS) has played a role in increasing electricity prices as it covers the power sector. Electricity producers burning coal, gas or oil products and setting the price in a given electricity market pass on carbon costs in the wholesale market price to some extent, depending on specific situations. Evidence shows that this is largely independent of whether certificates are allocated for free or have to be purchased on the market.

The carbon price between 5 and 15 EUR tCO₂ experienced in the EU ETS over the past two years has had an impact on wholesale electricity price in Europe ranging from 0.25 and 1 EUR cent/kWh. This means that between 50% and 67% of the CO₂ price is passed on in the electricity price per MWh. With industry retail prices between 7 and 13 EUR cent/kWh, the indirect cost impact from carbon on industry retail prices is less than 10%.

If carbon prices increase in the future – as expected by most market analysts – this will also increase the carbon costs on the electricity wholesale price, especially after 2020. In the case of gas-fired plants (Combined Cycle Gas Turbine), which are likely to become increasingly important after 2020 with respect to electricity price setting, about 30% of the ETS
allowances price translates into an increased electricity price per MWh. For example, a EUA price of 30 EUR would add some 10 EUR per MWh to the wholesale electricity price. However, different technologies will still set the price per hour over the year resulting in very variable pass through costs depending on the region and time considered.

**Lack of coherence in EU policies**

EU legislation has been adopted to meet the 20-20-20 targets, in particular the EU ETS Directive, the Renewables Directive and more recently the Energy Efficiency Directive. These policy tools and measures have a partially overlapping scope of application and have an impact one on another. Instead of mutual reinforcement, this causes inefficiencies and additional regulatory burdens on covered businesses.

**The EU ETS carbon price signal is undermined by competing policies**

The current price level in the EU ETS is mainly due to the economic crisis (around 800 million allowances, Figure 4). This indicates that the carbon market is functioning: the ex-ante allocation of allowances has been implemented to have certainty on the final emission reductions achieved while allowing price fluctuations in response to economic cycles.

Other factors such as a stronger than expected growth of renewables, large use of international offsets and progress in implementing energy efficiency measures are also helping to depress the carbon price.

**Abatement costs of technologies supported outside the EU ETS are very high**

Strong national incentives driven by the EU renewables target have not always promoted cost-effective abatement solutions in Europe while making the market-based EU ETS less effective in leading investment decisions in low-carbon technologies. Assuming that renewables substitute fossil-fuelled plants for power generation with a carbon intensity of about 500 g/kWh (this could be a mix of coal and gas-fired generation from different power plants), carbon avoidance costs for the electricity generated by renewables in Europe is in a range of 92 EUR t CO₂.

Most renewables and other low carbon technologies including nuclear or Carbon Capture and Storage (CCS) have a significant potential to improve efficiency and achieve cost reductions in the next decade. However, taking this into consideration and assuming increasing power prices, most renewables will not be cost-competitive before 2025 (Figure 5). Promoting the most mature renewable technologies still needing support in the appropriate sites would result in much lower total costs compared with large scale implementation of less cost-efficient technologies such as photovoltaic or offshore wind.

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**Figure 4: Drivers and impacts on carbon prices**

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Source: Frontier Economics, 2013
Fragmentation of the EU internal energy market

Although the interdependence between Member States in the field of energy has never been so strong in political, economic and technical terms, coordination of national energy policies remains weak in the EU. The energy mix remains a largely national matter. However, due to the ever-increasing interdependence of European energy markets, in particular in electricity, national energy policies and measures have an effect on other EU countries.

Uncoordinated national energy policies disrupt the functioning of the EU energy market

The nuclear phase-out decision in Germany in 2011 is the most notable example in recent years of a national decision, which will have lasting consequences for the EU’s energy market. The related reduction of production capacity in Europe is compensated by existing power stations until new units can be built. However, during this transitional period the European grid will remain fragile, notably in the event of an exceptional climate or other event increasing the risk of a large-scale blackout. As a consequence, some countries like France will have to meet an increasing and unforeseen demand in the coming years to compensate for the decisions of its neighbours.

The on-going discussion about the future of shale gas in Europe equally shows national divergences instead of a European strategic approach, to lower costs and increase security of supply. While some Member States are conducting explorations to assess further the potential of shale gas on their territory, others have decided for a moratorium on this technology.

More investments and joint planning are needed to connect energy markets in the EU

Although a well-functioning internal energy market alone will not entirely solve the challenge of energy prices in Europe, its completion through a higher rate of interconnections will be an important step.

However, the EU still has a relatively low interconnection rate, which affects the security of supply, heavily limits the potential of renewables integration and hinders the completion of the Internal Energy Market.

In 2002, the European Commission proposed that all Member States should aim to have at least 10% of their production serviceable by interconnectors. The European Council confirmed this objective in 2002. As of today, this target has not been met yet by several Member States: interconnection capacity is generally insufficient and certain regions, such as the Baltic States, the Iberian Peninsula and the United Kingdom and Ireland remain isolated.

Obstacles to development of cross-border networks are numerous. Regulation of energy transmission is still the responsibility of national regulators, more private investments are needed and interactions between cross-border interconnections and national systems must be improved. Massive investments of around 200 EUR billion are needed by 2020 for energy transmission projects of European interest.

The considerable changes affecting the EU energy market – notably the expansion of gas and renewable energies – may accelerate the need for the EU to advance market integration and improved cooperation in infrastructure.

Insufficient progress towards a global climate agreement

The development of carbon markets has been progressing unevenly though positively in many countries. Much more action is still needed in view of establishing a global level playing field for all major
industrialised and developing countries. Emissions trading schemes have started in Australia, California, Quebec and Kazakhstan, and legislation has been passed in South Korea. Notably, China will start seven pilot schemes this year and has announced that it plans to launch a national ETS in the period 2016-2020.

At the same time, United Nations Framework Convention on Climate Change (UNFCCC) negotiations have not yet managed to aggregate national activities into comparable legally binding commitments at international level. After the end of the first Kyoto Protocol commitment period on 31 December 2012, few governments have agreed to a second commitment period from 2013 to 2020. The EU, Australia, Norway, Switzerland and few others have put forward binding emission reduction targets under the Protocol. Canada, Japan, New Zealand and the Russian Federation have not signed up to a second commitment period. The US never ratified the Protocol, while developing countries like China, India and Brazil are not required to take binding targets under the Protocol. As a result, the on-going second commitment Period of the Kyoto Protocol includes countries accounting for about 15% of global emissions. The EU share of global emissions is significantly lowering from 19% in 1990 to 11% in 2013 and is expected to be 4-5% in 2030.

Parties are now engaged in finding an agreement for the post-2020 framework. In 2012, at the UNFCCC 18th Conference of the Parties held in Doha, it was agreed to streamline the negotiations structure and to focus future work on the “Durban Platform”. This will provide a single negotiating track involving all Parties (unlike the Kyoto Protocol) to finalise a global climate agreement by 2015. However, while some progress has been achieved on the implementation of issues such as technology and new market mechanism, Doha confirmed that tough and complex negotiations still lay ahead on the road towards a global agreement.

The present lack of a global level playing field in terms of climate legislation and the risk that this situation will not significantly change for many years constitute a remarkable challenge for European businesses competing globally.
IV. Policy recommendations on a 2030 framework for energy and climate

In light of important international developments and experiences gained from the 2020 energy and climate framework, BUSINESSEUROPE calls for a more realistic, cost-competitive and coordinated energy and climate policy for 2030. The renewed strategy should be articulated around the following seven main recommendations.

■ Policy recommendation 1: Establish competitiveness and security of supply targets

Europe will be successful in designing a post-2020 energy and climate policy only if it sets a framework in which cost-competitiveness, security of supply and climate objectives are placed on equal footing with shared competences among European and national authorities. While climate targets and policy instruments have been extensively developed at European level, their counterparts on cost-competitiveness and security of supply have not been sufficiently addressed. This has led to a pre-dominance of climate objectives over energy policy, underestimating the huge implications on energy prices and security of supply. Climate policy needs to be continued and streamlined, while at the same time Europe has to reinforce the two other pillars to get the balance right.

Europe should therefore establish targets and take measures to ensure energy competitiveness of industry and security of supply.

On energy competitiveness, a target for addressing the energy price differential between the EU and major competitors should be introduced to ensure political commitment. It should be built on the basis of information gathered by:

• Examining multiple energy prices (gas, electricity, carbon and oil) and targeting wholesale and retail prices for industry.

On security of supply, a regular monitoring for supply security has to be established, focusing principally on electricity, oil and gas. The security of supply of the electricity sector needs to take into account system capacity adequacy, transmission/distribution as well as fuel dependency. A potential indicator should be as “high level” as possible rather than following a micro-management approach. Consideration should also be given to indexes such as LOLE (Loss of Load Expectation) or SAIDI (System Average Interruption Duration Index) as the average duration of interruptions per consumer during the year.

Further mechanisms will be required to provide reliable and affordable energy supply e.g. long-term contracts are needed as legitimate instruments for capital-intensive energy projects.

■ Policy recommendation 2: Set a 2030 emissions reduction target

Substitute multiple targets for emissions reduction, renewable and energy efficiency with a single emissions reduction target

A single EU emissions reduction target for 2030 should be the main driver to incentivise the transition towards a more sustainable economy in Europe. Setting a target to 2030 would give the needed medium-to-long term perspective to business and investors and increase the predictability of the regulatory framework. Due to their overlapping scope with the EU ETS, the EU targets for energy efficiency and renewable energy sources should not be continued after 2020.

Any supplementary national measure should be well coordinated so as to effectively contribute to achievement of the EU emissions reduction target.

Set a binding 2030 emissions reduction target providing fair conditions for European business competing globally

BUSINESSEUROPE strongly supports the finalisation of a binding global climate agreement entering into force by 2020 and committing all parties and in particular large emitting economies to the reduction,
measurement, monitoring and reporting of greenhouse
gas emissions. In this context, the EU should set a
2030 emissions reduction target and provide an
adequate climate framework enabling investments of
all business sectors.

Whatever the outcome of the international climate
negotiations in 2015, the EU should set a binding
2030 emissions reduction target. However, in order
to decide on the appropriate level of ambition
for its 2030 emissions reduction target and avoid
negative consequences due to unilateral decisions,
the EU should take into account the outcome of the
negotiations.

It is important to note that a global climate agreement
will not necessarily result in comparable binding efforts
and costs for European industries and competing non-
European industries. In this context, the exact definition
of a meaningful and effective international agreement
still needs to be clarified. In any case, special attention
should be given to ensuring a global level playing
field for European business, also through a sectoral
assessment. Measures to address direct and indirect
carbon costs should be put in place whenever needed.

■ Policy recommendation 3:
Maintain the ETS as the cornerstone of
EU climate and energy policy

The ETS should be maintained as the main incentive
over the long term to reduce emissions for industry
and other covered sectors and to promote investments
in low carbon technologies. To be effective, limit
transition costs and provide a predictable investment
framework, it is crucial for the EU ETS to have a
stable long-term cap. One hundred per cent of the
ETS auctioning revenues should be used to support
European businesses in the transition towards a low-
carbon economy either by promoting R&D&I or by
preventing carbon leakage. Furthermore, with the EU
ETS being an integral part of the future EU energy
and climate policy, possible future changes to the EU
ETS, some of which are presented below, will have to
be assessed and implemented in a coherent way.

Achieving further improvements in the non-ETS sectors
will be crucial to reach the long-term objectives in the
most cost-efficient way. These sectors constitute more
than half of current CO₂ emissions in the EU. Notably,
a large share of energy efficiency and CO₂ reductions
potentials are untapped in buildings. This sector has
a high cost-effective savings, growth and job creation
potential.

The EU ETS must provide an incentive
to reduce emissions in a cost-effective
manner for all covered sectors

The role of the EU ETS from 2020-2030 should be to
facilitate carbon reductions in a cost efficient way for
covered installations or sectors. This can be achieved
through investments in low carbon technology,
renewable energy sources, energy efficiency or by
other means. Among other factors, the ETS market
based price signal will play a role in incentivising
investments to reduce emissions.

The ETS should continue to provide a common
regulatory framework for both the power sector
and covered energy-intensive sectors. However, to
address the risk of carbon leakage or the loss of
competitiveness of EU industry, different allocation
rules of EU emissions allowances for the power sector
and industry should also be maintained.

Ensure a level playing field for
European business competing globally
with appropriate support measures

Any proposal for the EU ETS for the 2020-2030 period
will have to include accompanying evidence-based
measures to address the issue of competitiveness of
European industry.

For sectors at risk of carbon leakage, full compensation
through free allocation based on benchmarks must
allow the most efficient companies to be globally
competitive without being penalised by direct carbon
costs. Real/recent production levels – combined
with realistic benchmarks – should be considered
as an option for the allocation of free allowances in
order to avoid problems deriving from over or under
allocation.

It is necessary to achieve a stronger convergence of
compensation levels for indirect carbon costs across
Member States; especially in the case of an increasing
EU carbon price. The current framework, only setting
maximum compensation levels allowed through
state aid guidelines, does not address the marked
differences across EU Member States. The disparity in
compensation currently provided at national level can
affect the level playing field within the EU. Therefore
rules for compensation for indirect costs should be developed at EU level through common sectoral approaches rather than through state aid rules.

Compensation should be determined with efficiency benchmarks in combination with current/recent electricity use and carbon price. As a result, efficient energy-intensive industry exposed to international competition should not be burdened with higher electricity costs due to carbon pricing.

The use of auctioning revenues should be considered for this purpose. As an alternative to direct financial support, additional free allocation could be envisaged to compensate energy-intensive trade-exposed industries for indirect carbon costs.

**Consider mechanisms to reduce carbon price volatility while ensuring a stable, predictable, market-based scheme**

Possible measures to tackle EU emission Allowance (EUA) price volatility post-2020 should be assessed when defining the long-term EU ETS cap. Striking the right balance between flexibility and predictability will require a very thorough impact assessment in cooperation with all stakeholders and especially with the actors that have to comply with the EU ETS. If applied, these measures and the rules to implement them should be defined in detail in advance to avoid ad hoc interventions. Clearly defined rules, including the responsibilities of public authorities, could increase predictability for market participants and minimise the risk of politicising the carbon market.

Any mechanism to reduce price volatility should be volume-based rather than price-based to allow price discovery by the market.

**Use flexible mechanisms and linking to emerging schemes to promote the creation of a global carbon market**

Access to international offsets must be allowed under a future ETS. They will provide a credible means to limit emissions efficiently by taking advantage of lower-cost opportunities and support the creation of a global carbon market. The Clean Development mechanism (CDM) should be maintained, improved and expanded. Linking the EU ETS to schemes that are emerging in other regions of the world increases the cost efficiency of mitigation and should be supported wherever possible.

New mechanisms should be developed rapidly and be available for voluntary use by governments depending on their national requirements. Should sectoral mechanisms be developed, they must be designed to avoid as far as possible the distortion of competition between regions for globally traded goods.

However, some limitations should be foreseen post 2020 in the absence of an international agreement in order to maintain ETS as a driver for investments in emissions reduction in Europe.

**Policy recommendation 4: Phase out support for the market deployment of energy produced from renewable sources**

The EU energy mix will continue to rely on a range of energy sources – oil, gas, coal, nuclear and renewable energy – in the coming decades. The share of renewable energy in this generation portfolio is expected to increase thereby contributing to the EU’s energy independence.

At the same time it must be acknowledged that energy prices have risen significantly due to renewable energy promotion. Support schemes have to be radically reviewed to avoid market distortions and especially to lower the cost burdens for European industry and the European economy as a whole. A more market-oriented approach based on a well functioning internal energy market is the right way forward to achieve a more balanced and cost efficient renewable policy.

Therefore, support for the market deployment of renewable energy production should be progressively phased out. To avoid significant disruption of the renewable technology sector, a transitional support structure should be designed taking into account the expected technological progress and decrease in production costs for different renewable technologies.

A streamlining and coordination of Member States’ support schemes will be essential in the transitional phase. The following core principles should apply:

- Support schemes should, as a matter of principle, be technology-neutral. Technology-specific support
might still be needed for less mature technologies but support schemes should follow strict cost-efficiency requirements and an upper threshold of support volumes should be clearly defined.

- Member States should consider cost-efficient and more market-oriented renewable support, including increased participation in wholesale markets and a requirement to be responsible for imbalance costs.
- Priority grid access for renewable energy should be phased out.
- Renewable policies should be embedded in a coherent energy policy, which also includes efficient national and cross-border infrastructure planning and short and transparent permitting procedures.

The transition schemes should start as early as possible and be as short as possible while still allowing for a smooth phase-out. After the transition period, national renewable support should be principally focused on the early stages of technology development whereas mature technologies will be primarily incentivised by a robust ETS.

Policy recommendation 5: Provide enabling R&D&I conditions for technology development

A strong, coordinated and focused European energy and low-carbon technology programme is urgently needed. It should upgrade the existing research, development, demonstration and innovation (R&D&I) frameworks at EU and national level.

This European energy and low-carbon technology programme should include all sectors, also with regard to production and process related efficiency innovation. The programme should distinguish development stages for immature technologies that could benefit from R&D support, with mature and market-ready technologies. Besides enhanced R&D co-financing schemes, the programme should target innovation efforts through pilot/demonstration projects, and be based on technology learning curves.

Financing (both private and public) will be crucial for upgrading the current Research Development, Demonstration and Innovation (R&D&I) activities into the above-mentioned European energy and low-carbon technology programme. On the one side, financing must include part of the revenues from EU ETS auctioning for financing low-carbon investments. On the other side, alternative-financing instruments will have to be utilised. Access to venture capital and private equity needs to be improved. Public/private instruments such as the European Investment Fund need to play a key role in de-risking and leveraging capital. Also, institutional investors such as pension funds should be attracted for long-term investments in energy related investments. Finally, public spending on R&D&I support schemes must be expanded as well.

Policy recommendation 6: Strengthen energy policy coordination among Member States

Improve coordination between national energy policies

The EU’s ability to act in the field of energy policy needs to be strengthened. It should establish a mandatory process for consulting Member States, including impact assessment, before national decisions with potentially wide consequences (e.g. grid congestion or security of supply) for neighbouring markets are taken to ensure better coordination of national policies and cooperation. While national energy mix is a Member-State competence, a better coordination of national policies (e.g. code of conduct) and duty to cooperate has to be implemented in Europe to ensure the proper functioning of the future interconnected energy market.

While caution is needed to avoid excessive compliance costs or delays, the creation of a European Energy Agency mandated to support Member States in the coordination of national energy policies should be considered.
**Foster internal electricity / gas markets and infrastructure**

Fostering the completion of the internal energy market through effective and consistent implementation of the Third Energy Package across Member States must be a priority. Stronger efforts regarding the financing and development of cross-border electricity and gas interconnection are also urgently needed. Modernising energy infrastructure will be a key component of Europe’s competitiveness. In particular, more efforts are required to:

- Reduce regulatory risks (permit granting) and increase public acceptance: the adopted changes at national level to facilitate and speed up investments need to be fully implemented (Energy Infrastructure Package). In order to drive a change of social perception, EU initiated co-ordinated and co-funded initiatives at national and local level are needed.
- Tackle the financing challenge: a strong and stable EU policy is needed which attracts long-term investors (e.g. insurance companies, pension funds) and sets up new innovative financial instruments (e.g. project bonds) for the required investments in energy infrastructure.
- Joint planning of networks: a push for joint planning of networks, in particular of interconnections, is essential to promote a shift towards a single European market and ensure the most cost-efficient and coherent solutions for infrastructure networks. More coherence is also needed between national, regional and EU-wide investment plans. The security challenge for energy islands should also be addressed.

**Policy recommendation 7:**

**Diversify EU’s energy supply sources**

**Adopt a positive attitude towards shale gas in Europe**

Europe needs a resolute strategy to enable Member States to explore and exploit potentially highly advantageous shale gas resources, in a sustainable manner and taking into account the environmental legislation in place. Instead of divergent national approaches, a coordinated European approach supportive of unconventional energy sources is urgently needed.

While the most significant shale gas reserves seem to be located in North America and Asia, the existence of important reserves has already been confirmed in several EU Member States as well, i.e. in France, Germany, Poland, Ireland, the Netherlands and the UK. However, further exploration needs to take place to assess opportunities in Europe with greater certainty.

**Strengthen the EU’s external energy diplomacy**

The EU should develop a much more robust external energy strategy by using its trade, diplomatic and development policy resources to improve relations with major suppliers. Moreover, an increased diversification of external suppliers will improve energy security and lead to more competitive prices for energy on the long-term. EU energy policy should also favour infrastructure investments that improve security of supply and diversification. The EU’s future foreign economic policy should have a significant energy pillar to establish effective dialogues with producer and transit countries and to improve coordination with energy-consuming nations. Finally, EU regulations and directives affecting the import of energy should be assessed in the light of their impact on security of supply at competitive prices. A negative impact assessment on security of supply and competitive prices should require the Commission to review its proposal accordingly.