

Enabling the Transition to a Green Economy: Government and business working together



Ministerial Foreword

1. The legacy of the last decade was an economy built on unsustainable levels of public and private debt and too heavy a reliance on financial services. As we emerge from the largest recession since the Great Depression we need strong, sustainable and balanced growth that is more evenly shared across the country and between industries. This is the basis of the Government's Plan for Growth, published alongside the Budget earlier this year. A key element of this plan is continuing the transition to a green economy. There are strong economic arguments for moving now: to avoid burdening our future generations with the costs of early inaction, to help UK businesses take advantage of new markets for environmental goods and services, and to demonstrate the strong stance the UK is taking internationally to reduce carbon and tackle climate change.
2. The transition to a green economy will bring a range of advantages to our economy. It can help UK businesses to manage risks, such as those from increasing and fluctuating fossil fuel prices; increase resilience, such as to the impacts of climate change and seize the opportunities from new and emerging markets, both nationally and internationally. Furthermore, businesses across the whole economy can save money through increased energy- and resource-efficiency.
3. A prosperous and thriving green economy will generate the investment, innovation, skills and entrepreneurship needed to transform our products and services, developing cleaner technologies and capturing new international markets. These opportunities for growth are

not only from conventional 'green' sectors such as low-carbon energy generation and environmental products and services, but in other sectors such as the automotive industry, retail and construction, as these sectors innovate to develop greener alternatives.

4. The transition brings challenges along with the opportunities, for example where sectors are more exposed to the effects of rising energy prices. For Government's part we must ensure that UK businesses are well placed to take advantage of the significant business opportunities and well equipped to manage the challenges presented by the global shift to a green, low-carbon, resource-efficient economy. As the likes of China and India respond with increased investment in low-carbon and environmental initiatives, so the UK must play strongly to its comparative advantages and position itself at the forefront of key markets.
5. This document sets out the range of policy tools we are using to support the transition to a green economy, the opportunities that are created and the implications for the way in which businesses operate.
6. This document is a product of collaborative working across Government, reflecting not only the broad policy coverage on the green agenda, but also that a green economy will only be achieved through working together – through concerted action across Government, but also through Government working together with businesses and with civil society. The commitments in this document demonstrate a shared responsibility to take action.
7. We have been extremely grateful for the engagement with many business and other stakeholders. This is a positive example of Government and businesses working together to make the transition to a greener, low-carbon, resource-efficient economy a reality.



Caroline Spelman



Vince Cable



Chris Huhne

What is a green economy?

7. A green economy is not a sub-set of the economy at large – our whole economy needs to be green. A green economy will maximise value and growth across the whole economy, while managing natural assets sustainably.
8. Our vision is that our green economy of the future will:
 - **Grow sustainably and for the long term.** Growth in the economy will be achieved and wealth generated while emissions and other environmental impacts are reduced. Opportunities for green growth will be facilitated – including in a growing low-carbon and environmental goods and services sector – and the global competitiveness of UK industry maintained.
 - **Use natural resources efficiently.** Effective demand management and efficiency measures for energy and other resources will be used in our homes, offices and businesses across the economy. Inputs of materials to production processes should be optimised and the level of waste to landfill should decrease. New process and products will be required creating new market opportunities.
 - **Be more resilient.** The UK will have a reduced reliance on fossil fuels whilst maintaining secure supplies of energy and other natural resources. The economy will be more resilient and prepared for the implications of climate change and environmental risks such as floods and heat waves.
 - **Exploit Comparative Advantages** – UK businesses will be well placed to take advantage of the expanding markets for greener goods and services

Why a green economy?

9. There is a strong case for moving the UK economy onto a greener footing: According to the Stern Review the global costs of climate change could be between 5% and 20% of GDP per annum if we fail to act, dwarfing the costs of effective international action, estimated at around 1% of GDP in 2050. In addition the net costs of mitigation in the short to medium term will be higher if global action is delayed or if there is uncertainty about the investment and changes in behaviour needed to make the transition.
10. The Government's Plan for Growth¹ makes clear that decarbonising the economy provides major opportunities for UK businesses. At the last Budget, the Government set out its ambition for increased investment in low-carbon technologies and a commitment to benchmark the UK against the top countries in the world. The global low-carbon market was worth more than £3.2 trillion in 2009/10 and is projected to reach £4 trillion by 2015 as economies around the world invest in low-carbon technologies across a broad range of sectors. The UK share of that market is more than £116 billion in 2009/10, but it could be much larger. If we act now, UK businesses can be at the forefront of the transition.
11. In addition, the UK is becoming increasingly dependent on imported fossil fuels – by 2020 we could be importing 45-60% of our oil and 70% or more of our gas. At the same time, global demand is likely to increase, leading to supply constraints and volatile prices². Access to other critical natural resources such as water and minerals could also be constrained in the future. Supplies of rare earth elements for example, are dominated by China, where recent export restrictions have led to constrained supplies. The UK needs to become more resilient to these price variations, develop alternative sources

¹ The Plan for Growth, March 2011

² DECC Annual Energy Statement July 2010

of supply, and make more efficient use of natural resources.

12. The Government recognises that there will be increased costs of some resources, and changing patterns of investment and innovation towards green activity. As we make the transition, we will need to take into account the distributional impacts on certain households and sectors, including for example energy intensive industries. We will take active steps to help these industries over the transition because the green economy will continue to have and need these sectors.
13. There are actions that can deliver both economic and environmental gains in the short-term, such as those which improve energy and resource efficiency. Maximising these opportunities and managing the costs of transition to a green economy will require choosing the most efficient mix of interventions where the benefits justify the costs, as well as providing a robust, credible and long-term policy framework to increase business certainty of payback from investment. To achieve this thriving green economy, both Government and businesses need to act.

Government Action

14. Government is using a range of policy tools to support the transition, including: promotion of international action; regulation; financial incentives; voluntary agreements; fiscal measures; public sector procurement; provision of information; and targeted work to unblock non-financial barriers to the deployment of clean energy technologies. Using these tools in the right way that balances supporting good behaviour and discouraging poor environmental outcomes is important for ensuring that change happens, that benefits from that change are maximised and costs are minimised
15. To invest in new systems, processes and tools, businesses require certainty on Government action. Alongside this document, we have

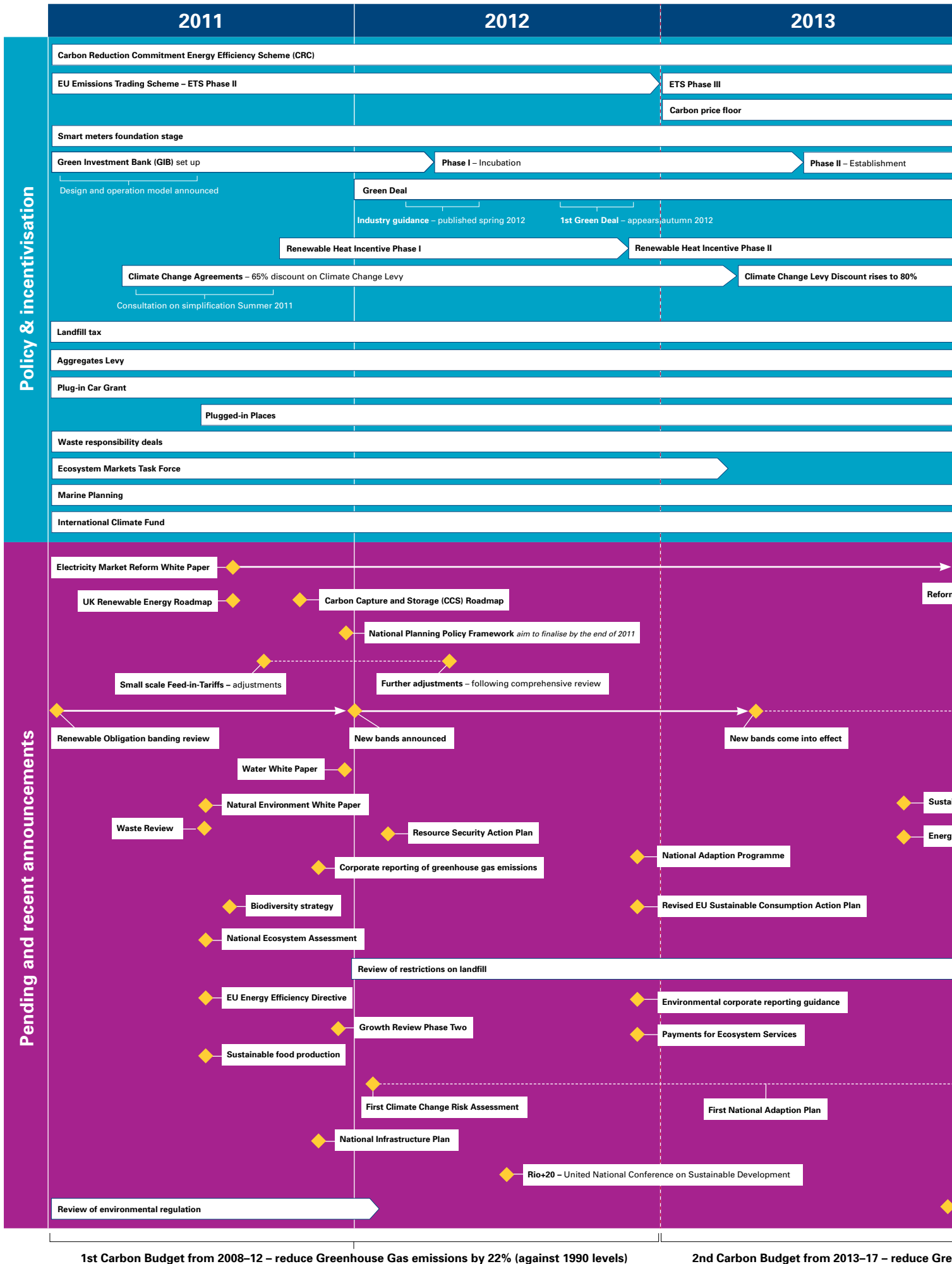
produced a visual timeline for the key policies required for a green economy and an indication of their direction of travel over the next decade. Our progress on many of these actions can be tracked through our Carbon Plan which brings together the actions across Government on climate change.

International action

16. We need a global shift to a green economy, both to ensure effective joint action and to avoid undermining the competitiveness of UK businesses.
17. The EU can play an important role in driving global ambition on the green economy and ensuring a level playing field. A developing EU market for green goods and services will open up bigger markets for UK businesses, helping to promote sustainable growth as well as allowing the EU to leverage its market power internationally working in partnership with other economies to promote high environmental standards.
18. The transition presents opportunities for the UK to be a global leader in areas of competitive advantage for example in off-shore wind, and to increase exports of greener goods and services as global markets expand. Government can help businesses to identify and seize opportunities overseas and businesses can highlight opportunities abroad, sharing experience and showcasing success stories.
19. **The UK government will promote international action to develop a green economy, including through global agreements, EU strategies, and other initiatives, and working through the G20 and other forums to encourage green growth. The Government's commercial diplomacy will maximise the export opportunities of the country's green businesses.**

Driving Investment in Infrastructure

20. Transport and energy are engines for economic growth, powering our work and connecting businesses to their markets.



2011

2012

2013

Policy & incentivisation

Pending and recent announcements

Carbon Reduction Commitment Energy Efficiency Scheme (CRC)

EU Emissions Trading Scheme – ETS Phase II

ETS Phase III

Carbon price floor

Smart meters foundation stage

Green Investment Bank (GIB) set up

Phase I – Incubation

Phase II – Establishment

Design and operation model announced

Green Deal

Industry guidance – published spring 2012

1st Green Deal – appears autumn 2012

Renewable Heat Incentive Phase I

Renewable Heat Incentive Phase II

Climate Change Agreements – 65% discount on Climate Change Levy

Climate Change Levy Discount rises to 80%

Consultation on simplification Summer 2011

Landfill tax

Aggregates Levy

Plug-in Car Grant

Plugged-in Places

Waste responsibility deals

Ecosystem Markets Task Force

Marine Planning

International Climate Fund

Electricity Market Reform White Paper

UK Renewable Energy Roadmap

Carbon Capture and Storage (CCS) Roadmap

National Planning Policy Framework aim to finalise by the end of 2011

Small scale Feed-in-Tariffs – adjustments

Further adjustments – following comprehensive review

Renewable Obligation banding review

New bands announced

New bands come into effect

Water White Paper

Natural Environment White Paper

Waste Review

Resource Security Action Plan

Corporate reporting of greenhouse gas emissions

National Adaption Programme

Biodiversity strategy

National Ecosystem Assessment

Revised EU Sustainable Consumption Action Plan

Review of restrictions on landfill

EU Energy Efficiency Directive

Environmental corporate reporting guidance

Growth Review Phase Two

Payments for Ecosystem Services

Sustainable food production

First Climate Change Risk Assessment

First National Adaption Plan

National Infrastructure Plan

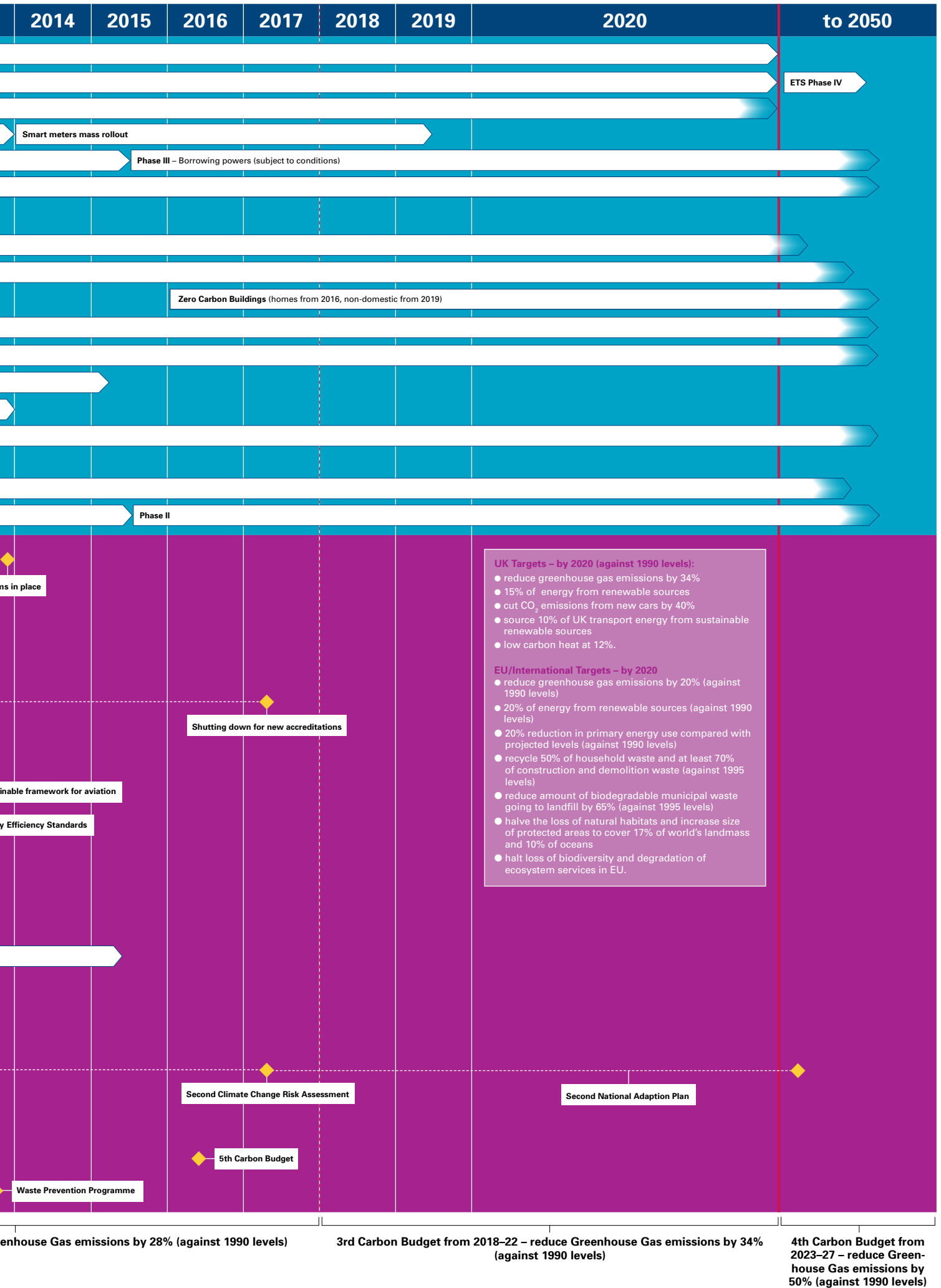
Rio+20 – United National Conference on Sustainable Development

Review of environmental regulation

1st Carbon Budget from 2008–12 – reduce Greenhouse Gas emissions by 22% (against 1990 levels)

2nd Carbon Budget from 2013–17 – reduce Gre

Policy Timeline



To sustain and safeguard future growth, we will also need to reform our water, waste and flood management systems, and ensure that infrastructure is resilient to the impacts of climate change. This Government is putting in place the necessary mechanisms to attract investment in the infrastructure that will support our economy now and enable it to grow sustainably for our future. This includes driving investment through:

- The largest reform of the electricity market since privatisation, to bring forward the £110bn needed in electricity generation infrastructure.
- Supporting low carbon transport infrastructure and facilitating the development and manufacture of ultra low emission vehicles and recharging infrastructure.
- The Green Deal which will create the financing mechanism to support investment in energy in our homes and businesses
- Our Green Investment Bank which will facilitate increased and accelerated private sector investment in infrastructure projects that support economic growth and our environmental objectives, such as offshore wind, industrial energy efficiency and commercial and industrial waste as well as growth capital for innovative green technologies.

21. Delivering new major infrastructure requires an enabling planning regime which is rapid, predictable, transparent and democratically accountable. We are making a number of reforms to deliver these objectives through the Localism Bill and recently delivered the National Policy Statements for major energy infrastructure before Parliament.
22. The Government announced an overhaul of planning policy which applies to all forms of development under the threshold for major infrastructure, designed to consolidate existing planning policy into a single concise National Planning Policy Framework. This includes setting out how the planning system should

support the delivery of renewable energy and minimise vulnerability to the impacts of climate change. The new Framework has been designed to be user-friendly and accessible, providing clear policies on making robust local and neighbourhood plans and development management decisions. Public consultation on a draft Framework opened on 25 July 2011³. Following the consultation, we will aim to finalise the Framework by the end of 2011.

Regulation

23. Regulation has been, and will remain, an important tool in encouraging businesses to develop greener products and services by offering a clear direction of travel and a level playing field. Businesses can benefit from the certainty that regulation offers, which can in some instances – in energy efficiency, for example – lead to a better deal for consumers.
24. **The Government will work to ensure that the system of environmental regulation is effective, proportionate, coherent, clear and implemented in a way that minimises burdens on businesses**, in line with the principles of better regulation.

Voluntary agreements

25. A wide range of voluntary agreements have been used for different green economy issues, from single, tangible issues (e.g. single use carrier bags) to more complex supply chain issues (e.g. the sustainable clothing roadmap). This voluntary approach is less burdensome than regulation, and, developed intelligently, can achieve positive outcomes freeing businesses and society from unnecessary obligations, unlocking creative sector specific and local responses, improving competitiveness and allowing people to take greater responsibility for their own lives.
26. The Government believes there is scope for further voluntary action on the green economy, with businesses and Government working together as part of the Big Society. **Our**

3 <http://www.communities.gov.uk/news/corporate/1951729>

general policy will be to explore voluntary agreements and other less burdensome alternatives to regulation wherever this would be practical, especially in resource efficiency, waste, sustainable products and food.

Fiscal measures

27. Fiscal measures, such as environmental taxes, can be effective in driving change. They can, for example, work to discourage damaging environmental behaviours (e.g. Climate Change Levy, Landfill tax, carbon floor price); incentivise environmentally-friendly products (e.g. Vehicle Excise Duty) and energy efficiency (e.g. Climate Change Agreements; Enhanced Capital Allowances). To support de-carbonisation and provide certainty for investors on the carbon price, a carbon floor price was announced in Budget 2011.
28. **The Government will increase the proportion of tax revenue accounted for by environmental taxes targeting measures to maximise opportunities for green growth in the UK.**

Enabling innovation

29. Many of the main drivers of innovation will be through generating new market opportunities. However, funding support will remain necessary and important, especially for technological innovations.
30. Going forward, developing environmental technologies with environmental benefits will remain a key priority for Government Innovation support such as from the Research Councils, Energy Technology Institute and the Technology Strategy Board among others.

Building the right skills

31. The transition to a green economy requires a workforce with the right skills. This includes not only skills in the low carbon and environmental goods and services sector, but also those needed to help all businesses use natural resources efficiently and sustainably and to be resilient to climate change. A new 'skills for a green economy' grouping of Sector Skills Councils will help business understand

changing skills requirements; other actions include improving the quality of information, advice and guidance available on careers in a Green Economy together with information on the skills linked to the Green Economy that will be needed in the future, through the new National Careers Service to be launched in April 2012. The Government will also improve the quality of skills provision in the further education system and raising awareness and understanding of the green economy through the work of Unionlearn to support lifelong learning among the workforce.

Public procurement

32. Going forward, **Government will buy more sustainable and efficient products within the context of the overarching priorities of value for money and streamlining procurement processes, and engage with its suppliers to understand and reduce the impacts of its supply chain.** This will include further use of Government Buying Standards and improving and publishing data on Government's supply chain impacts.

Provision of information

33. Access to information and advice about environmental impact can make it easier for businesses to produce greener products and services, and for consumers to buy them.
34. Government has an important role helping provide information to businesses – for example, on the expected impacts of climate change, resource efficiency and resource risks. **Government will continue to make information available to businesses in these areas, to make that information easier for businesses to use, and to advise businesses on how best to use it.**

Support for transitional costs

35. The Government is committed to supporting particularly those businesses that will be hardest hit by the transitional costs of greening the economy. **Government will announce a package of measures to help**

energy intensive industries adjust to the transition to a low-carbon economy before the end of the year.

Implications for businesses

36. There will be both opportunities and challenges from the transition to a green economy and businesses will need to adapt to take advantage of benefits and manage risks. Impacts will be felt by sectors of the economy in different ways and to varying degrees.
 37. For example, some sectors will see increased demand for goods and services. Some sectors will need to transform aspects of their business models to reduce their environmental impact, while others will need to manage potential increased input costs or lower or volatile demand.
 38. To get to a green economy, businesses will need to:
 - **Pursue green growth.** There will be a significant increase in green business sectors such as low-carbon energy generation and climate change adaptation services, with the UK being a global leader in some areas, bringing increased exports alongside strong UK demand. But there will also be opportunities in the wider economy – in sectors such as business and professional services, retail, automotive, construction, electronics and other manufacturing sectors.
 - **Maximise their energy- and resource-efficiency.** There are clear business benefits and market opportunities from improved energy- and resource-efficiency, delivering major cost savings and increased competitiveness.
 - **Innovate.** Both new and existing technologies, production processes and business models will be used to reduce use of resources, waste, carbon emissions and other environmental impacts across supply chains. Innovation will also be required to lower the cost of key 'green' technologies and improve their performance.
- **Improve infrastructure.** Both businesses and Government will need to invest in new infrastructure that supports the green economy.
 - **Increase resilience.** The future risks of energy and other resource security and the impacts of inevitable climate change will need to be built into business planning.
 - **Adapt to challenges.** For some sectors of the economy, costs from climate change policies and increased energy prices will need to be addressed, particularly in the context of international competitiveness. For many businesses climate change adaptation will need to be built into future business planning.
 - **Help consumers make informed choices.** Through provision of information, businesses can influence consumer behaviour and support them in making greener choices in their respective markets.

Working together to achieve a green economy

39. While many businesses in the UK are already at the forefront of a greener economy there is further to go. Businesses and Government must work together to fully realise the opportunities and thus drive green growth.
40. Government has already set out in the recent publication Every Business Commits that it will help businesses succeed so they can create jobs, wealth and opportunity. Government in return has asked businesses to act, including by reducing carbon and protecting the environment.
41. As we transition to a green economy the relationship between business and Government needs to be even stronger. Below are a series of Government commitments that will support the move to a green economy. Also highlighted are actions that a number of leading businesses are already undertaking and that we encourage others to consider.

Government commitments to support a green economy

Government will...	Business could...
<p>Develop a green policy framework which: Is effective, clear, stable and as streamlined and minimally burdensome as possible; Encourages investment; Protects existing investments, where possible, through use of 'grandfathering' (protecting pre-existing rights).</p>	<p>Work with Government to: explore voluntary approaches to greening products and services; Identify areas of green policy and regulation which can be streamlined whilst remaining effective; Invest in greener products, services and production processes.</p>
<p>Promote the UK as a global leader in green exports and encourage green inward investment.</p>	<p>Help Government publicise the skills and expertise of UK-based business.</p>
<p>Provide accessible advice and support to enable businesses to increase their resource efficiency, resource security and resilience to climate change.</p>	<p>Become increasingly resource efficient and build risks of energy/resource security and climate change into future business planning.</p>
<p>Ensure that Government 'green' policies take into account the competitiveness of UK-based companies, including Energy Intensive Industries and develop measures to support businesses most hit by transitional costs.</p>	<p>Continue to explore production processes and business models which reduce use of resources and carbon emissions.</p>
<p>Ensure the skills system responds to the demand for skills created by shift to green economy.</p>	<p>Help articulate skills demand through involvement in LEPs, and Sector Skills Councils</p>
<p>Support the development of greener products, services, and technologies, though continued support for R&D and innovation.</p>	<p>Design, develop and promote greener products and services, including enabling technologies.</p>
<p>Encourage investment in infrastructure and ensure that infrastructure supports the green economy, including through the Green Investment Bank</p>	<p>Invest in infrastructure that will support the green economy.</p>
<p>Enable UK-based businesses to compete in green, low carbon supply chains where the UK has expertise.</p>	<p>Work together, where possible, to help build UK-based supply chains.</p>
<p>Procure products that meet cost-effective sustainability standards.</p>	<p>Adopt sustainability standards for their procurement.</p>
<p>Help businesses understand the value of and their impact on the natural environment.</p>	<p>Consider the value of the natural environment to their business.</p>

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