National Audit Office

Report
by the Comptroller
and Auditor General

Department of Energy & Climate Change

The Levy Control Framework

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National Audit Office

Department of Energy & Climate Change

The Levy Control Framework

Report by the Comptroller and Auditor General

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Comptroller and Auditor General
National Audit Office

27 November 2013

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This report examines whether the Levy Control Framework has proved effective in meeting its objectives so far, and risks to its future effectiveness as levy-funded schemes change.

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This report can be found on the National Audit Office website at www.nao.org.uk/2013-levy-control

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Key facts

£2bn

the level of the cap on spending under the Levy Control Framework in 2011-12, covering the **Renewables Obligation, Feed-in Tariffs and Warm Home Discount**

£7.6bn

the level of the cap on spending on electricity policy schemes under the Levy Control Framework in 2020-21 (in 2011-12 prices), covering the **Renewables Obligation, Feed-in Tariffs and Contracts for Difference**

33%

the proportion of electricity which the Department would expect from renewable sources in 2020-21 under its central assumptions

£1,458 million	the cost of the **Renewables Obligation** in 2011-12 to support investment in renewable generation
£151 million	the cost of **Feed-in Tariffs** in 2011-12 to support small-scale renewable energy generators
£238 million	the cost of the **Warm Home Discount** in 2011-12 to help vulnerable consumers with their electricity bills
£247 million	the amount by which the Framework cap exceeded combined spending on the **Renewables Obligation**, **Feed-in Tariffs** and **Warm Home Discount** in 2011-12
£2,534 million	the forecast cost of the **Contracts for Difference** scheme in 2020-21 (in 2011-12 prices) to provide support to new low carbon generators

Summary

1 The Department of Energy & Climate Change (the Department) has responsibility for UK energy policy and has overall responsibility within government for delivery to meet UK climate change commitments. The Department has three overarching energy policy objectives: to deliver secure, low carbon and affordable energy for consumers. The Department has used a range of policies and regulatory requirements for the energy market to achieve its objectives. Some of the Department's interventions involve levies on electricity suppliers.

2 Levy-funded expenditure is analogous to government spending. Levy schemes are approved by Parliament and require electricity suppliers to meet their costs. Electricity suppliers seek to recover these costs from consumers through bills rather than the government funding the schemes directly through general taxation. In 2011, the Department and HM Treasury established the Levy Control Framework (the Framework) to cap the cost of levy-funded schemes to ensure the Department:

> "achieves its fuel poverty, energy and climate change goals in a way that is consistent with economic recovery and minimising the impact on consumer bills."[1]

The Framework specifies arrangements for monitoring the costs of levy-funded schemes, and requires early action to keep costs within the caps.

Scope of our report

3 We reviewed the operation of the Framework to assess its effectiveness for providing control and accountability to Parliament for levies and levy-funded expenditure. We used five criteria derived from the model we use for assessing the maturity of the government's financial management of public expenditure (**Figure 1** overleaf).[2]

1 HM Treasury, *Control framework for DECC levy-funded spending*, March 2011.
2 National Audit Office, *Financial management maturity model*, January 2012.

Figure 1
Criteria for evaluating the Levy Control Framework

Coverage	Framework coverage has a clear rationale, which gives investors confidence and fits with the Department's main financial control regime, without duplication or unjustifiable gaps.
Governance	The Department's and HM Treasury's governance arrangements for the Framework adequately engage skilled and empowered people in decision-making.
Forecasts	Forecasts used by the Department to set annual Framework spending caps are based on a sound understanding of the factors influencing costs and outcomes, and reasonable assumptions regarding future levels of those factors.
Controls	The Department has effective controls for costs of, and outcomes from, schemes covered by the Framework and uses them appropriately.
Reporting	The Department reports actual and forecast costs and outcomes from Framework measures transparently, promptly and accurately to ministers, Parliament and the public.

Source: National Audit Office

4 This report is organised in three parts:

- Part One describes the Framework.
- Part Two assesses the effectiveness of the Framework so far.
- Part Three assesses risks to the future effectiveness of the Framework.

Key findings

5 **The Framework is a valuable tool supporting control of the costs to consumers from pursuing energy policy objectives.** The Department delivers a number of its energy schemes through levies on energy suppliers, which suppliers seek to recover through consumers' bills. This levy-funded spending is not subject to the controls routinely applied to departmental spending funded by general taxation. By setting a cap on levy-funded spending, the Framework should encourage the Department to control the burden on consumers and ensure that spending is subject to appropriate oversight by HM Treasury equivalent to spending from general taxation. It should encourage consideration of the trade-offs between schemes that may be needed to achieve the government's goals while minimising impacts on consumer bills. And, by enabling reporting of the overall cost of levy-funded schemes for consumers, the Framework should enable greater transparency and more effective public and parliamentary scrutiny (paragraphs 2.7 to 2.15).

Coverage

6 The Framework does not currently cover all consumer-funded energy schemes. The Department and HM Treasury decided the Framework's current scope on the basis of actual or anticipated decisions by the Office for National Statistics on which schemes should be classified as levies. The Office for National Statistics has not reached a classification decision on the Energy Companies Obligation, a consumer-funded scheme, which could reasonably be regarded as a levy. The Department and HM Treasury consider that the Energy Companies Obligation is a regulation and not a levy, and have therefore not included it in the Framework. The Department monitors the costs and outcomes of the Energy Companies Obligation outside the Framework, and has reported publicly on the impact of this scheme on consumer bills (paragraphs 2.2 to 2.4).

7 By establishing the level of support available through the Framework for certain levy-funded schemes to 2020-21, the Department has provided greater certainty for investors. The Department has yet, however, to clearly define the future scope of the Framework. The Department has announced upper limits on the levies raised to fund electricity policies, covering the Renewables Obligation, Feed-in Tariffs and Contracts for Difference to 2020-21. It has stated too that these caps do not include the new Capacity Market scheme or non-electricity policies that are levy-funded, such as the Warm Home Discount. But it has yet to finalise cost control arrangements for the Capacity Market scheme and, within it, the Electricity Demand Reduction measures. The Department has also stated that these caps are intended to cover electricity policy in general, and would therefore apply equally to any future levy-funded electricity policy. Investors seek transparency over the scope and scale of any caps on funding to give them confidence in the support available for potential investments (paragraphs 3.2 to 3.5).

Governance

8 A levy control board has enabled joint HM Treasury and departmental oversight of the operation of the Framework but the board has focused on cost control and not the associated impacts on energy policy outcomes. The Department considers that its policy teams consider outcomes and potential trade-offs between levy-funded schemes when developing policy advice for ministers. Contrary to its terms of reference, the levy control board's monitoring has therefore focused on costs compared with Framework caps and on providing HM Treasury with assurance that the costs of levy-funded schemes are subject to appropriate controls. The Department and HM Treasury have not taken the opportunity to use the board to jointly consider costs and outcomes in aggregate across all levy-funded schemes. They are currently considering how the board should operate in future (paragraphs 2.5 to 2.6).

9 The governance arrangements for the Framework will need to be updated when new delivery bodies take up their responsibilities for new forms of levy-funded spending under the Energy Bill 2012-13 to 2013-14. National Grid will assess applications and allocate contracts under the Contracts for Difference scheme in accordance with an allocation framework agreed by government. A government-owned counterparty body will then award and administer those contracts. The Framework's governance arrangements will need to be revised to ensure all major stakeholders in the operation of the Framework can coordinate their activities to keep within the Framework cap (paragraphs 3.6 to 3.9).

Forecasting

10 The Department's decisions on the Framework's cap are informed by substantial and detailed modelling of the electricity market as well as consultation with industry and market intelligence gathering. We examined the Department's dynamic dispatch model (DDM) as part of our study of infrastructure investment.[3] We concluded that design decisions in the DDM about how to model investor and generator behaviour appear reasonable and that overall it performs well in many areas. However, we also identified weaknesses, for example in the Department's quality assurance of the model, which prevent us having the highest degree of confidence in the model forecasts. The Department has stated that it is working to address these issues, and has commissioned an independent professional services firm to review the underlying formulae used in the model (paragraphs 3.10 to 3.16).

11 The Department expects to achieve its ambition of 30 per cent renewable electricity by 2020 within the cost caps it has set for the Framework. The Department has published scenarios illustrating how it expects to remain within the cap and achieve its ambition for renewable electricity in a range of circumstances. The Department has undertaken but not published further scenario analysis including some scenarios where Framework caps would be breached. However, the Department's scenario analysis does not systematically show the effects of varying individual input assumptions in the model or the relative probability of different scenarios. The Department's analysis does not give an indication of the probability that the Department's current policies will achieve the ambition for 30 per cent renewable electricity by 2020 within Framework caps (paragraphs 3.14 to 3.15).

3 Comptroller and Auditor General, *Infrastructure investment: the impact on consumer bills*, Session 2013-14, HC 812-I, National Audit Office, November 2013.

Controls

12 The Department has improved its cost controls for schemes currently covered by the Framework. The Department expects levy-funded spending to exceed the Framework cap in three out of four years over the spending review period to 2015, but it has introduced controls to limit spending so that it comes within the agreed 20 per cent headroom, on top of the cap. It expects to come within the £5.3 billion cap (in nominal prices) set for the Framework for 2015-16 by £300 million. To achieve this, the Department has refined its controls over the Renewables Obligation by adjusting the support levels for individual technologies and providing flexibility for further control of support for biomass plant to prevent cost escalation. The Department also introduced a method to automatically reduce tariffs available under the Feed-in Tariff scheme if take-up exceeds its expectations (paragraphs 2.7 to 2.15).

13 The Contracts for Difference scheme introduces a new risk of levy costs escalating if energy market prices fall below expected levels. The cost of levy-funded schemes is set to rise from £1.8 billion in 2011-12 to up to £7.6 billion in 2020-21 (in 2011-12 prices), with the inclusion of the Contracts for Difference scheme. The principle control for the Department will be the number of contracts awarded and their strike prices. The levy cost arising will depend on the difference between the strike prices in the contracts and the prevailing wholesale electricity price and how much of the contracted generating capacity comes on stream. To achieve its objectives of providing certainty over support for decarbonisation while minimising costs to consumers, the Department will need to work with its Framework partners to provide up-to-date and transparent forecasts of levy costs and outcomes (paragraphs 3.17 to 3.23).

Reporting

14 Ofgem publishes separate reports on each of the schemes currently included in the Framework, and the Department has also published information on the impact of its policies on prices and bills. However, the Department has not reported aggregate actual expenditure against the Framework cap, limiting proper public and parliamentary scrutiny of costs to consumers. When the Framework was published, the Department intended that actual and forecast revenues and expenditure under the Framework schemes would be reported through its Annual Accounts. The Department subsequently was unable to report the scheme revenues and expenditure in this way because they did not meet the conditions for inclusion in financial statements under International Financial Reporting Standards. Ofgem publishes expenditure and outcomes for each scheme up to 11 months after year-end in line with legal requirements, although preliminary data from suppliers is available earlier, within six months of year-end, and could be published earlier. The Department has not defined how current arrangements for enforcement of compliance with the schemes could support assurance on its own reporting of scheme spending (paragraphs 2.16 to 2.21).

15 Public reporting of Framework costs together with outcomes is fundamental to providing confidence in the support regime. Reporting outcomes alongside costs supports transparency on the relative merits of spending on different schemes. The Department currently regularly publishes data on the level of renewable generation achieved as a result of the Renewables Obligation and the Feed-in Tariff schemes, but does not report these outcomes alongside costs. It has also published data on the impact of energy schemes on consumer bills. In the future, because of the interaction between government interventions and market prices, the Department will need to report levy costs alongside outcomes and impacts on energy bills to consumers to provide a complete picture of overall impact. In addition, reporting of the Framework will need to be consistent with the other public reporting of the administration of the schemes, including the reporting by the proposed new Contracts for Difference counterparty body (paragraphs 3.24 to 3.26).

Overall conclusion

16 In establishing the Framework, the government has rightly recognised the importance of monitoring and controlling the considerable cost of energy schemes that consumers fund through their energy bills. The Framework has prompted the Department to monitor actual and expected costs closely and consider its response to unexpected increases in costs of schemes charged to consumers.

17 However, the operation of the Framework has not been fully effective in some key areas. The joint Treasury and departmental governance board for the Framework has not strongly linked spending and outcomes in its deliberations. Reporting on Framework schemes has not supported effective public and parliamentary scrutiny of the overall costs and outcomes from levy-funded spending. The Framework does not cover the consumer-funded Energy Companies Obligation scheme and it is not yet clear whether it will cover the new Capacity Market scheme, including Electricity Demand Reduction measures. As consumer-funded spending increases and new schemes are introduced, the Department needs to assure Parliament and the public that it has robust arrangements to monitor, control and report on all consumer-funded spending, and the outcomes it is intended to secure.

Recommendations

Coverage

18 The Department and HM Treasury should keep in mind the underlying objective of the Framework and aim for transparency and accountability when deciding which schemes to include within the Framework. The Department has processes in place to monitor costs to consumers of the Energy Companies Obligation and is considering measures to control the cost of the Capacity Market scheme. If these schemes are not covered by the Framework, the Department should explain how it will control the aggregate costs of consumer-funded schemes and assess whether together these schemes are achieving the outcomes needed to meet its objectives.

Forecasts

19 The Department should develop its testing of the modelling results used to inform the Framework and develop the capability to allow more sophisticated analysis of the probability of different scenarios. The Department should continue to address weaknesses in its quality assurance of the forecasting model. This should include a review of the outputs from the most recent version of the model to gauge its accuracy against known outcomes and explain any discrepancies.

Controls

20 The Department must ensure that it monitors the risk of under- or over-allocating available budgets for Contracts for Difference. In particular, it will need to consider:

- how to allocate budgets over time so that best value is achieved from the available budget; and
- the continuing risk of breaching its spending cap if the wholesale price falls.

Reporting

21 The Department and HM Treasury are proposing to supplement existing public reporting on individual Framework schemes by reporting routinely to Parliament on spending on levy-funded schemes. These reports should cover past and future spending across all the schemes within the Framework and the outcomes achieved or expected. This reporting should also provide appropriate independent assurance on reported figures and the effective operation of controls. In particular, the Department should do the following:

- Establish a bespoke process allowing Parliament to scrutinise actual and forecast committed levy-funded spending, since it falls outside the established financial accounting and reporting framework for the Department.
- Conduct or commission appropriate independent assurance of the robustness of data on actual and forecast Framework spending and outcomes.
- Indicate how and when controls have been applied and the impact on outcomes and costs.
- Ensure that any costs reported under the Framework can be reconciled with those reported by government-owned counterparty or settlement bodies for the same schemes.

Part One

Levy Control Framework

1.1 This part describes the following aspects of the Levy Control Framework (the Framework):

- Purpose.
- Content.
- Current coverage and spending caps.
- Future coverage and spending caps.

Purpose

1.2 The key objectives of the government's energy policy are to ensure a secure energy supply, to meet statutory decarbonisation targets and to keep the cost of energy affordable for consumers. Some of the Department of Energy & Climate Change's (the Department's) interventions involve levies on electricity suppliers. Government assumes that suppliers pass the cost of these levies and levy-funded expenditure on to consumers through their electricity bills. The Department and HM Treasury decided in the 2010 Spending Review to introduce the Framework to oversee and control the cost of these levies from 2011-12 onwards.

1.3 HM Treasury and the Department describe the purpose of the Framework as making sure that the Department:

> "achieves its fuel poverty, energy and climate change goals in a way that is consistent with economic recovery and minimising the impact on consumer bills." [4]

1.4 The Framework states that the government remains committed to maintaining support levels for those existing investments where it has said it would do so and to not making retrospective changes. The Department has stated that the Framework is intended to enforce this policy, to manage levy-funded spending policies proactively so they are affordable and sustainable. This is an important principle for investor confidence. In other countries support to existing investments has been, or is due to be, curtailed to limit costs. In Spain, for example, the government has reduced solar generation tariff rates and limited production hours for existing wind and solar plant to reduce feed-in tariff costs. This may damage prospects for future investment as well as reducing returns for existing investors.

4 HM Treasury, *Control framework for DECC levy-funded spending*, March 2011.

Content

1.5 The Framework:

- has caps on levy-funded spending in each financial year;
- requires the Department to prepare and update forecasts of costs for each levy-funded scheme, share how they prepared them with HM Treasury, and get them verified by the Office for Budget Responsibility;
- requires the Department to develop action plans with HM Treasury to bring spending within caps if forecasts suggest spending will exceed them, with particular urgency if forecasts exceed caps by a specified extent – currently 20 per cent;
- says that the Department may have to cover all or part of levy-funded spending above the cap from its Departmental Expenditure Limit if controls are ineffective; and
- lets the Department change levy-funded energy policies, provided their costs remain within the specified overall caps.

1.6 The Framework aligns with the main control regimes for direct government spending. By setting a budget for levy-funded schemes, the Framework caps overall expenditure on levy-funded schemes and in doing so helps to control costs that are assumed to be passed on to consumers. The Framework states that its implementation will be consistent with HM Treasury's guidance on handling public funds: *Managing public money*.[5]

Current coverage and spending caps

1.7 The Framework currently covers three schemes. The Renewables Obligation and the Feed-in Tariffs schemes are designed to encourage investment in renewable electricity generation to help the UK meet its target of deriving 15 per cent of its energy from renewable sources by 2020. The Warm Home Discount is designed to relieve fuel poverty.

Renewables Obligation

1.8 Established in 2002, the Renewables Obligation requires energy suppliers to present Renewables Obligation Certificates (ROCs) to Ofgem for each megawatt hour (MWh) of electricity they supply to customers, or make up any shortfall through buy-out payments. The government has set the buy-out price per ROC in legislation, increasing it in line with the retail prices index. Suppliers pass on the cost of meeting their obligation to their customers. Renewable electricity generators receive ROCs in proportion to the electricity they generate from accredited plant. The additional income they gain from selling ROCs offsets the costs of establishing and operating a renewable plant, encouraging investment in renewable generation. The Renewables Obligation is the biggest scheme in the Framework, costing an estimated £2 billion in 2012-13. The scheme will not be available to new generating capacity from 1 April 2017 but capacity accredited before then will receive ROCs for 20 years.

5 HM Treasury, *Managing public money*, July 2013.

Feed-in Tariffs

1.9 Established in 2010, the scheme requires electricity suppliers to pay people with small-scale renewable generation equipment, such as solar panels or small-scale wind turbines, for the electricity they generate. They are paid a fixed price per MWh for all the electricity they generate and an additional premium for any electricity they do not use themselves and export to the Grid. The expected cost of the Feed-in Tariff scheme to consumers is £497 million in 2012-13.

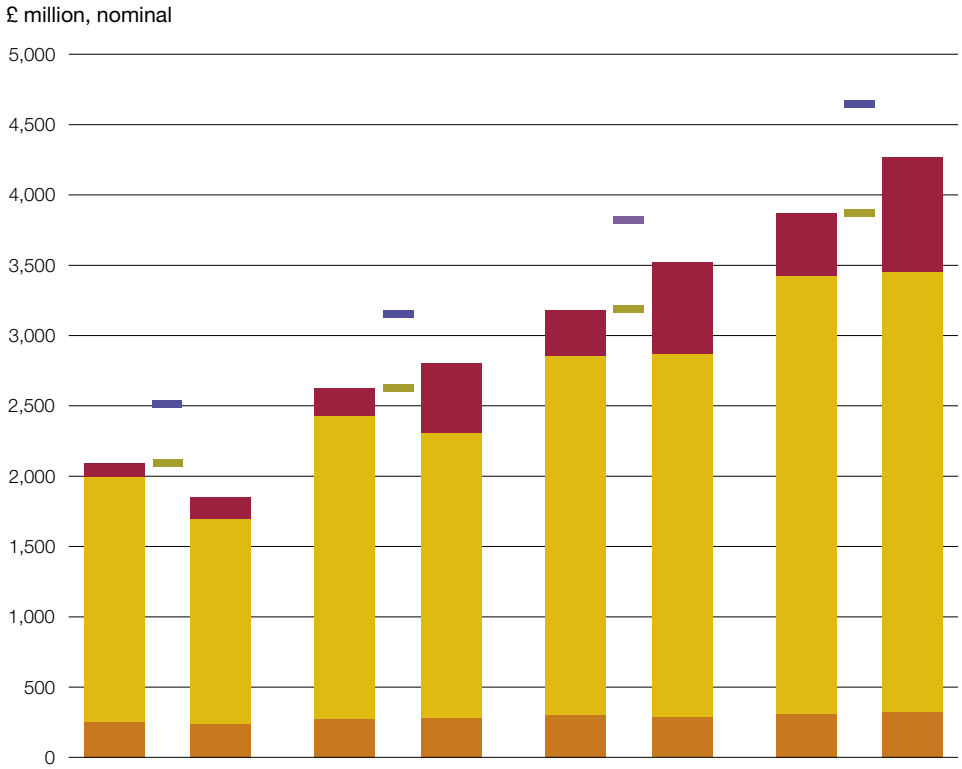
Warm Home Discount

1.10 Established in 2011, this scheme requires energy suppliers to spend defined amounts on supporting vulnerable and poor consumers at risk of fuel poverty, through rebates or discounts on their electricity bills. Suppliers must provide discounts to a 'core group' of electricity account holders, those in receipt of specified pension benefits. They may also provide discounts or rebates to other vulnerable consumers in line with regulations overseen by Ofgem. The Warm Home Discount scheme cost consumers £283 million in 2012-13.

1.11 HM Treasury set the cap for the Framework at a total of £11.8 billion (in nominal terms) for the period 2011 to 2015. Spending under the Framework is forecast to exceed caps but remain within headroom during the current spending review period. For example in 2012-13, the combined cost of the Renewables Obligation, Feed-in Tariffs and Warm Home Discount schemes is expected to exceed the Framework cap by £173 million but remain within the £3.2 billion cap including headroom (**Figure 2**).

Figure 2

Spending under the Framework is forecast to exceed caps but remain within headroom during the current spending review period



	2011-12		2012-13		2013-14		2014-15	
	Cap	Outturn	Cap	Forecast	Cap	Forecast	Cap	Forecast
Feed-in Tariffs	94	151	196	497	328	647	446	817
Renewables Obligation	1,750	1,458	2,156	2,020	2,556	2,583	3,114	3,132
Warm Homes Discount	250	238	275	283	300	290	310	320
Total		**1,847**		**2,800**		**3,520**		**4,269**
Framework cap	2,094		2,627		3,184		3,870	
Framework cap plus 20% headroom	2,513		3,152		3,821		4,644	

Notes

1 The Department has confirmed data on actual spend for 2011-12. Data for 2012-13 to 2014-15 are estimates.

2 The Framework cap is set for all schemes but there are separate budgets for individual schemes for monitoring purposes.

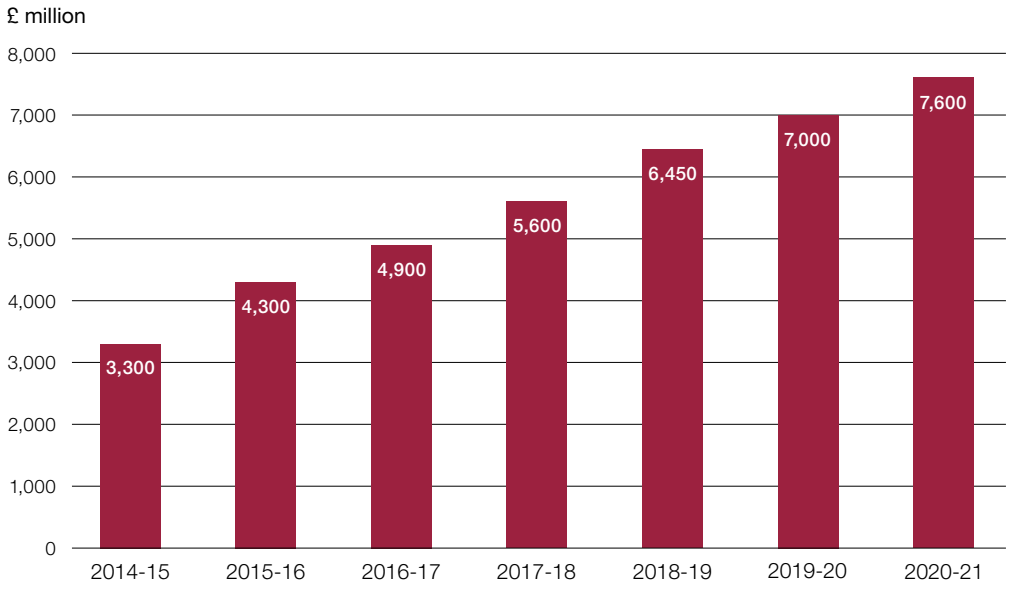
Source: Department of Energy & Climate Change

Future coverage and spending caps

1.12 From 2014 onwards, the Framework's scope is set to expand to include the cost of Contracts for Difference. The Contracts for Difference scheme, which is to be enabled by the Energy Bill 2012-13 to 2013-14, will replace the Renewables Obligation. Contracts will be available to all new low-carbon generation plants, and will be between the plant owner and a government-owned body set up to act as the counterparty to the contracts. The counterparty body will pay the generator holding the contract the difference between the prevailing wholesale electricity price and a fixed price indexed to inflation set at the start of the contract – known as the strike price. If the wholesale price is higher than the strike price the generator pays the counterparty body the difference. Contracts will normally be for 15 years for renewable generation technologies but may be longer for nuclear plant.

1.13 In November 2012, the Department announced an upper limit of £7.6 billion (2011-12 prices) for 2020-21 on the combined cost of levy-funded electricity policies within the Framework. This covered costs of the Renewables Obligation, the Feed-in Tariff and Contracts for Difference, but excluded the Warm Home Discount which may not be in operation in 2020-21. In June 2013, the Department provided a profile of the annual caps on these policies between 2014-15 and 2020-21 (**Figure 3**).[6]

Figure 3
Levy Control Framework caps for electricity policies rise to 2020-21



Notes

1 The Department has published Framework caps to 2020-21 in 2011-12 prices.

2 The Department publishes Framework caps in nominal terms at the time of the relevant spending review or spending round. It has, however, estimated that the cap in 2020-21 will be £9.8 billion in nominal terms (i.e. 2020-21 prices).

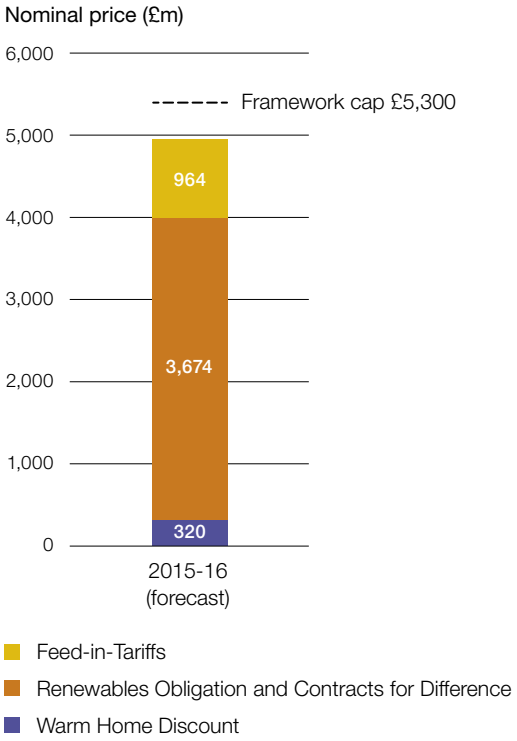
Source: Department of Energy & Climate Change

6 Department of Energy & Climate Change, *Electricity Market Reform: Delivering UK Investment*, June 2013, p. 12.

1.14 As part of the 2013 Spending Round, the Department and HM Treasury have also agreed a £5.3 billion cap in nominal prices covering the Framework as a whole in 2015-16. This includes £320 million to fund the Warm Home Discount. The Department expects spending to come within this cap by £300 million (**Figure 4**).

Figure 4

The Department expects spending to come within the Framework cap in 2015-16



Note

1 The Department is currently determining the budget available for Contracts for Difference. Spending on the Renewables Obligation is likely to be significantly greater than spending on Contracts for Difference in 2015-16.

Source: Department of Energy & Climate Change

Part Two

The Framework's effectiveness

2.1 This part considers the Levy Control Framework's (the Framework's) effectiveness so far, in relation to each of our evaluative criteria:

- Coverage
- Governance
- Forecasting and controls for each scheme
- Reporting

Coverage

2.2 Neither the Department of Energy & Climate Change (the Department) nor HM Treasury have clearly established their own rationale for determining which schemes should be regarded as levies and should be controlled under the Framework to achieve the stated objective of achieving energy policy goals in a way consistent with minimising impacts on consumer bills. Rather, in setting the Framework's scope, the Department has relied on judgements by the Office for National Statistics (ONS) on what constitutes a levy.

2.3 The ONS's formal classification of schemes as levies has not, however, kept pace with the Department's policies. The ONS treats spending from certain schemes that private companies pay for as if they were directly funded by government. It does this where it considers that a scheme is in effect a form of tax or levy because the government has forced transactions (both tax and spend) to take place in the economy. However, no money actually flows through the government accounts. The majority of other EU member states do not include such tax-and-spend schemes in their statistics on the level of taxes and government spending. In 2010 the ONS introduced a moratorium on classifying new schemes as levies because the UK's national accounts and public sector finance statistics were becoming less comparable to those in other EU countries. They ceased this moratorium in September 2012.

2.4 The Department and HM Treasury determined the Framework's scope in 2011 on the basis of the ONS's classification of the Renewables Obligation as a levy, and in the expectation that the ONS would classify the Feed-in Tariffs and Warm Home Discount schemes in the same way.[7] The Community Energy Saving Programme (CESP) and the Carbon Emission Reduction Target (CERT), which were schemes that also placed an obligation on energy suppliers, were not included in the Framework as the ONS had yet to classify them. The ONS gave HM Treasury informal advice in 2010 that CERT and CESP should be considered as tax-and-spend schemes. In November 2012, the ONS classified the Feed-in Tariff scheme as a tax-and-spend scheme. The ONS has not yet formally classified the Warm Home Discount as tax and spend, nor considered the classification of the Energy Companies Obligation, which replaced CERT and CESP (**Figure 5**). The Department and HM Treasury currently consider that the Energy Companies Obligation is a regulation and not a levy and have therefore not included it in the Framework. The Department monitors the costs of the Energy Companies Obligation for consumers outside the Framework, and has reported publicly on the impact of this scheme on consumer bills.

Figure 5

The Energy Companies Obligation is a consumer-funded scheme not included in the Framework

The Energy Companies Obligation requires energy suppliers to perform activities which they would not otherwise undertake.

The Energy Companies Obligation places obligations on larger energy suppliers to provide energy efficiency measures to domestic energy users. The obligation may be regarded as being equivalent to the government levying the money from suppliers required to meet the Obligation and then providing the energy efficiency measures itself.

The government sets the scale of the Obligation …

By 31 March 2015, obligated suppliers must achieve carbon and cost savings targets that the government sets. The targets are divided between obligated suppliers according to a formula proportionate to their share of domestic customers. The price of individual energy efficiency measures is set by the market.

… and hence has a mechanism for controlling the cost to consumers.

Energy suppliers are responsible for the full costs of meeting their obligations but the Department recognises that costs are passed on to consumer energy bills. The Department has estimated the annual net cost of the scheme to energy suppliers and hence to consumers at £1.3 billion.

The government has powers to monitor the costs of the Obligation.

The Energy Act 2011 includes powers to allow the Secretary of State to monitor closely the measures achieved under the Energy Companies Obligation and the cost to energy companies of achieving them.

Source: National Audit Office

7 Department of Energy & Climate Change, *Control Framework for DECC levy-funded spending: Questions and Answers*, December 2011, p. 3.

Governance

2.5 The levy control board governs the Framework. The board comprises appropriately skilled and empowered civil servants from the Department and HM Treasury. The board is jointly chaired by the head of HM Treasury's spending team for energy, environment and agriculture and the Department's finance director. It is attended by representatives of the relevant policy teams within the Department as well as the Department's chief economist. The board's overarching objective is to enable the Department and HM Treasury to understand actual and forecast spending through the levies, assess key risks and advise policy teams and hence ministers on actions needed to mitigate risks to the Framework cap. The Department and HM Treasury intend the board to complement and not replace existing governance structures for the policies that fall within the Framework.

2.6 The role of the board, as defined in its terms of reference, included both monitoring spending against the caps and monitoring whether policies are meeting their objectives and carbon targets. In practice, however, the board has not considered outcomes from Framework schemes alongside costs and has not therefore sought to identify the best combination of outcomes and affordability within that cap. So, it examines how deployment of renewable technologies affects costs charged to the Framework but it has not tracked the resulting progress towards decarbonisation. The Department considers that its policy teams address outcomes and potential trade-offs between levy-funded schemes outside the Framework, when producing policy advice for ministers and developing and updating the related impact assessments.

Forecasting and controls

Warm Home Discount

2.7 The government set a levy limit of £1.125 billion on the Warm Home Discount scheme for the four years 2011-12 to 2014-15 under the 2010 Spending Review. The Department's forecasts for the Warm Home Discount have not been accurate, overestimating costs in 2011-12 and 2013-14 and underestimating them in 2012-13 (**Figure 6**). Spending on the Warm Home Discount is determined by the cost of discounts provided to the 'core group' of vulnerable consumers, as the Department determines the total amount suppliers are allowed to spend on discounts and rebates for those households outside the core group to stay within the levy limit. So the level of underspend or overspend each year is determined by the extent to which the actual cost of the 'core group' aligns with the government's estimate of the number of consumers on qualifying benefits at a given future date. The Department is working closely with the Department for Work & Pensions to improve its forecasting of the core group cost for 2014-15 to ensure suppliers use the full amount provided and maximise its impact.

Figure 6

Numbers of Warm Home Discount core group rebates have varied from forecasts

Year	Level of rebate (£)	Initial forecast number of rebates	Forecast number of rebates at start of year	Actual or latest forecast number of rebates	Initial forecast spending (£m, nominal)	Forecast spending at start of year (£m, nominal)	Actual or latest forecast spending (£m, nominal)
2011-12	120	807,000	808,000	701,746	97.0	97.0	84.2
2012-13	130	1,097,000	1,011,000	1,157,879	143.0	131.0	150.5
2013-14	135	1,179,000	1,485,000	1,229,000	159.0	200.0	166.0
2014-15	140	1,355,000			190.0		

Source: Department of Energy & Climate Change

Renewables Obligation

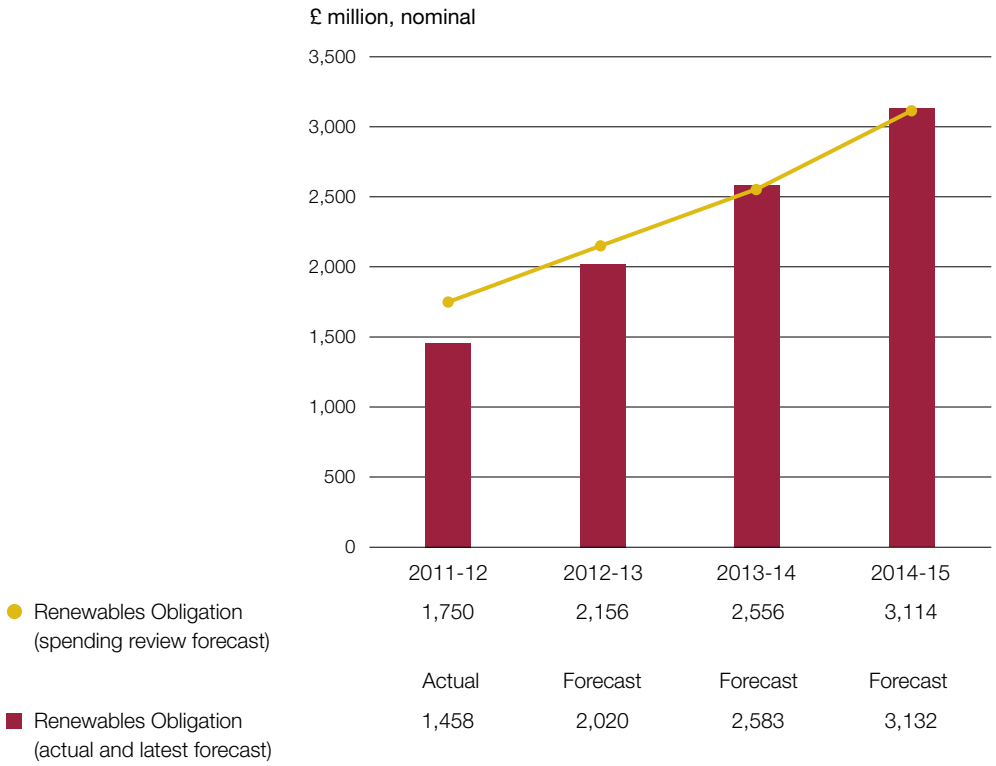
2.8 The Department's market intelligence gives it a sound basis for setting the level of the Renewables Obligation for the year ahead and for forecasting the costs and outcomes from the scheme in the near term. The Department collects detailed information from generators and investors on existing, committed and planned renewable generation projects, the electricity they are expected to generate and the Renewable Obligation Certificates (ROCs) they would receive.

2.9 The Department has improved its control over the economic models it uses to inform its longer-term forecasts. For the 2010 Spending Review and for its subsequent banding review, the Department relied on modelling of likely investment decisions that it commissioned from consultants. Reliance on consultants limited the Department's control over the development and use of these economic models. In 2011 the Department commissioned for itself the development of a dynamic despatch model (DDM) to forecast investment in new generating plant, and the electricity produced by that plant, to help design electricity market reform. The Department now owns and uses a version of this model to analyse alternative scenarios and policy options, and set the level of the Framework cap. We review the DDM in Part Three.

2.10 The Department's data and latest estimates of the future costs of the Obligation remain in line with its forecasts at the time of the 2010 Spending Review. This is with the exception of 2011-12 when it substantially overestimated the scheme's cost (**Figure 7** overleaf).

Figure 7

Renewables Obligation spending has been close to forecasts in most years



Note

1 The Department originally set the upper limit of the Renewables Obligation at £1,764 in 2011-12 but adjusted this total down to £1,750 million to reflect a technical change in assumptions about allocating costs between the Renewables Obligation and the Feed-in Tariff scheme.

Source: Department of Energy & Climate Change

2.11 The Department controls the cost of the Renewables Obligation mainly by banding the ROCs receivable for different types of technology. ROC bands determine the number of ROCs which generators receive and can sell to suppliers which informs the size of the Obligation. The Department introduced banding in 2009 and has revised banding once since then, in 2012. This banding review set the number of ROCs per megawatt hour which new plant would receive if gaining accreditation during the last four years of the scheme from 2013 to 2017, when the scheme closes to newly accredited plant. The Department does not expect to conduct a further banding review before closing the scheme, although it can undertake emergency banding reviews, for example if the level of renewable generation supported under the scheme means more ROCs are likely to be available to suppliers than they need to meet their obligations. The levels of support to most types of plant are now therefore fixed. The relative attractiveness of this support will depend on the design of the Contracts for Difference scheme, which we discuss in Part Three.

2.12 The future cost of the Renewables Obligation could still be higher than expected if there is an escalation in the number of renewable generation plants seeking accreditation to receive ROCs. The Department has taken steps to enable it to control this cost. Coal-fired power stations can be converted to accept biomass fuels relatively quickly and therefore may not be predicted long in advance. The Department has introduced a voluntary pre-registration process to give early warning of planned conversions. And in the case of plants converting on a unit by unit basis, it only guarantees future levels of ROC support for individual converted boilers or turbines rather than for whole plants. For new dedicated biomass plant the Department has improved controls by ceasing to guarantee the level of ROCs for further new plants once installed capacity reaches 400 megawatts. The Department also considered how best to control solar panel deployment and concluded existing provisions for emergency banding reviews were an adequate control. It is considering how best to keep track of solar deployment and its impact on Framework spending.

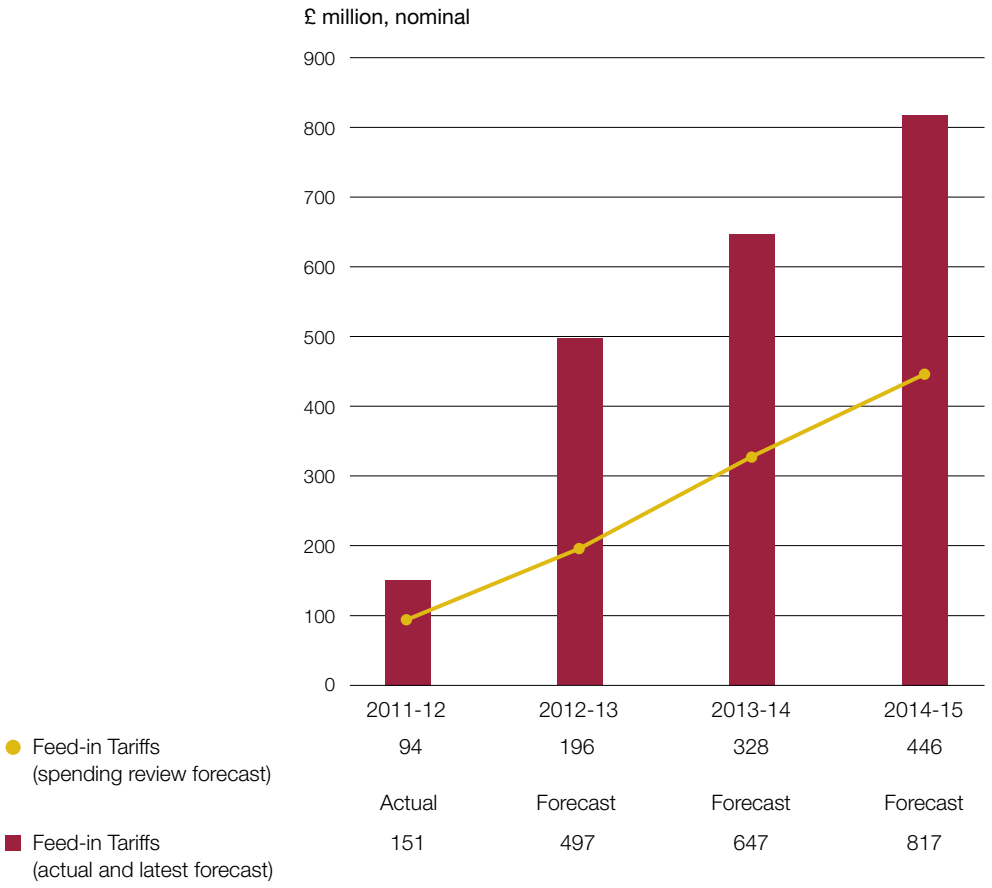
Feed-in Tariffs

2.13 The Department's forecasts of the cost of the Feed-in Tariff scheme for the spending review period were inaccurate and costs exceeded the forecasts from 2010-11, the first year of the scheme. As the Department is committed to honouring tariffs once committed, the cost to consumers from the Feed-in Tariff scheme is set to continue to exceed original estimates. The Department forecast in October 2010 that the cost of the scheme would be £446 million in 2014-15 (in nominal terms). The Department now estimates that the cost of the scheme in 2014-15 will be almost twice as high at £817 million (**Figure 8** overleaf).

2.14 The higher-than-anticipated spending on the Feed-in Tariff scheme arose because take-up for small-scale solar panel installations exceeded expectations. This was mainly because of lower-than-expected technology costs, costs of borrowing, and returns on alternative investments. The Department's monitoring failed to give it early warning of this rapid increase in take-up.[8]

8 In November 2011, the National Audit Office examined the Department's modelling used to set feed-in tariffs for solar panels in a briefing prepared at the request of the House of Commons Environmental Audit Committee and the Energy and Climate Change Committee.

Figure 8
Feed-in Tariff spending has exceeded forecasts



Source: Department of Energy & Climate Change

2.15 The Department has brought the costs and outcomes of the scheme under control. It has amended the statutory provisions to enable it to reduce tariff rates as demand increases (known as 'degression'), at three-monthly intervals for solar panels and annually for other technologies. Through the levy control board, the Department and HM Treasury have closely monitored the impact of this control and assessed whether further action might be necessary to keep costs within the cap. The Department has also sought to improve its market intelligence and closely monitors the rate of take-up under the scheme and changes in the costs of key technologies. The Department recognises that a surge in deployment before an automatic degression can take place could still result in higher-than-expected costs. The Department has adjusted its modelling of the Feed-in Tariff scheme to allow for the impact of its degression mechanism. However, the Department's internal auditors noted in March 2013 a lack of formal controls for the Department to review the data and assumptions informing the Feed-in Tariffs model. Without such controls, the model is at risk of becoming outdated and could result in inaccurate forecasts of the level of uptake and levy cost.

Reporting: actuals and outcomes against caps

2.16 The Department and HM Treasury have not yet agreed a means of reporting aggregate costs for consumers of levy schemes covered under the Framework to Parliament and the public. When the Framework was established in 2011, the Department and HM Treasury intended that planned and actual expenditure under the Framework schemes would be reported through its Annual Report and Accounts. Since 2011-12, HM Treasury has included statements of planned levy-funded spending under Framework schemes in the Department's Main Estimates. However, the Department, operating under a derogation approved by the Chief Secretary to the Treasury, has each year removed revenues and expenditure relating to levy-funded schemes from the Estimates at the supplementary stage. It has done so because levy-funded spending does not meet the conditions for recognition in the Department's Annual Accounts under the International Financial Reporting Standards framework adopted by HM Treasury. As a result, the Department has not been able to routinely report levy-funded spending in its Annual Report and Accounts.

2.17 The Department and HM Treasury are now considering alternative options for reporting estimates and outturns for the Framework to Parliament. In November 2013, the Treasury proposed to the House of Commons Liaison Committee that it would require departments to report annually to Parliament on such 'imputed' taxation and public expenditure, as recognised by the ONS in their national accounts publications, in cases where they are not reported to Parliament through the normal estimates and accounts process. These reports will be subject to audit and will be implemented for the 2013-14 financial year onwards.

2.18 Ofgem, as administrator of the schemes currently in the Framework, validates data on scheme outcomes and publishes individual annual reports on each scheme, setting out outcomes and overall scheme expenditure. Before reporting, Ofgem undertakes a variety of assurance and fraud prevention activities to satisfy itself that the data energy suppliers provide on their activities under the schemes are robust. For example, Ofgem requires suppliers to confirm the accuracy of their submitted data (such as electricity supply data); it commissions audits of supplier submissions to assess compliance with licence obligations and scheme regulations; and it performs a series of checks to address fraud risks at critical decision points, for example when accrediting generators. For the Warm Home Discount it reports in October, six months after year-end; for the Feed-in Tariff scheme in December, eight months after year-end and for the Renewables Obligation in March, 11 months after year-end. The timetable for suppliers to report full data to Ofgem under each scheme is set out in legislation. This, and the need for Ofgem to ensure each supplier has complied with all aspects of each scheme, limits Ofgem's scope to report earlier on the full scheme operation.

2.19 For the Framework, the Department could report on total spending and outcomes under each scheme earlier. For example, when robust estimates of the overall actual cost of the Renewables Obligation and data on the renewable generation resulting from the scheme is available six months after the year-end. The Department has not defined how current arrangements for enforcement of compliance with the schemes could support assurance on its own reporting of scheme spending.

2.20 The Department does not routinely report outcomes for Framework schemes as a whole but regularly monitors and publishes data on the quantity of renewable generation resulting from the Feed-in Tariff scheme and the Renewables Obligation as well as indicators of fuel poverty. The Department has also published information on the impact of its policies on prices and bills. However, it has not set separate outcome targets for planned spending under each of the Feed-in Tariff scheme, the Renewables Obligation or the Warm Home Discount. As a result, this reporting does not support the Department making trade-off decisions across the schemes, should it need to reduce spending to remain in line with the Framework's overall affordability cap.

2.21 Public reporting of the cost of levy-funded schemes has not been consistent. The ONS and the Office for Budget Responsibility report the actual and forecast costs of levy-funded schemes but their reporting has not been aligned with data published by Ofgem or the Department's own spending projections:

- The ONS reports receipts and expenditure from levies in its routine public finance and national accounts statistics. For 2011-12 it reported on the Renewables Obligation using an outdated methodology, which counted less than a third of actual spending. It has corrected this in its most recent blue book of national accounts published in July 2013.[9]

- The Office for Budget Responsibility used the earlier ONS numbers to project receipts and expenditure from the Renewables Obligation. As a result, in its March 2013 *Economic and fiscal outlook report*, the Office for Budget Responsibility reported figures for the Renewables Obligation that were some £1.5 billion less than the Department's estimate for 2012-13 and £3 billion less for 2017-18.[10] The Office for Budget Responsibility will include Renewables Obligation forecasts based on the ONS's corrected methodology in its autumn 2013 forecasts.

9 Office for National Statistics, *United Kingdom National Accounts*, July 2013.
10 Office for Budgetary Responsibility, *Economic and fiscal outlook*, March 2013.

Part Three

Future risks to the effectiveness of the Framework

3.1 This part addresses new risks arising from the deployment of new market interventions under electricity market reform. It covers our evaluative criteria for:

- coverage;
- governance;
- forecasting;
- controls; and
- reporting.

Coverage risks

3.2 The Levy Control Framework (the Framework) will continue to cover the Renewables Obligation, Feed-in Tariffs and any extension of the Warm Home Discount scheme. Spending on Contracts for Difference will also be chargeable to the Framework as the scheme will be funded through an obligation on electricity suppliers who are assumed to recoup their costs from consumers. The Department of Energy & Climate Change (the Department) has announced upper limits on the levies raised to fund electricity policies such as the Renewables Obligation, Feed-in Tariffs and Contracts for Difference and stated that these caps are intended to cover electricity policy in general, and would therefore apply equally to any future levy-funded electricity policy. It has not included 'non-electricity policies' that are levy-funded, such as the Warm Home Discount, in these caps.

3.3 The Department has yet to finalise with HM Treasury cost-control arrangements for other levy-funded schemes proposed in the Energy Bill 2012-13 to 2013-14. It has announced that it will create a Capacity Market to ensure demand can be met either by keeping additional generating capacity available or through short-term reductions in demand. The Capacity Market will not be subject to the announced caps on levy-funded electricity policies. But it has not determined whether it may nonetheless be included in the Framework. The Department has also yet to clarify how it will control the cost to consumers of Electricity Demand Reduction measures that the Department is piloting,[11] which are proposed to offer financial incentives to encourage long-term reductions in electricity demand as part of the Capacity Market scheme. Uncertainty over the coverage of the

11 The Department's pilot of Electricity Demand Reduction measures is taxpayer funded. As part of the Capacity Market, these measures would, in the future, be funded by consumers.

Framework risks undermining the confidence of potential investors that levy-funded support will be available to make their investment economic. Including some consumer-funded electricity market support schemes but not others also risks undermining the utility of the Framework as a mechanism for considering the affordability and relative merits of spending on different interventions.

3.4 The Department expects that the payments made to generators through the Capacity Market will reduce the wholesale price of electricity by ensuring consistency of supply at peak times and by reducing financing costs for new non-intermittent generation plant. This could mean that there is no significant net impact from these payments on consumers' bills. Nevertheless the Capacity Market and, within it, Electricity Demand Reduction measures would involve payments by a government-owned body, which the Department assumes will ultimately be funded by a charge on consumers. Bringing all such arrangements within a single Framework would give Parliament and consumers transparency on: costs, the consequences of decisions on individual measures for other schemes in the Framework, and on any trade-offs made.

3.5 For potential investors, the Framework's coverage and uncertainty over the budget available to individual schemes can undermine confidence to invest. In January 2013 the three major UK renewable energy trade associations wrote to the government. They expressed concern at the Department's proposals to include market-wide incentives for electricity demand reduction initiatives in the Framework and the lack of clarity over whether such measures would be funded from the announced Framework cap for 2020-21 of £7.6 billion (2011-12 prices).

Governance risks

3.6 The proposals in the Energy Bill 2012-13 to 2013-14 will give several bodies new roles in controlling spending on levy-funded schemes. The involvement of new bodies adds complexity and risks making spending under the Framework more difficult to control unless the Department clearly defines roles and responsibilities and actively manages potential conflicts of interest.

3.7 National Grid, in its capacity as the System Operator of the Great Britain transmission system, is taking on a new role as the electricity market reform delivery body. This role includes allocating contracts for difference and running auctions for capacity agreements. National Grid will also collect evidence, conduct analysis and modelling to inform key ministerial decisions on Contracts for Difference and the Capacity Market. The Department and other stakeholders have identified several potential conflicts of interest between National Grid's role as provider and its commercial roles as a system and transmission operator. The Department has consulted on the issue of conflicts of interest and concluded that it can mitigate or address these potential conflicts through specific measures in the design of its electricity market reforms.

3.8 For the Contracts for Difference scheme, the Department plans to establish a government company to act as a counterparty, which will enter into contracts, make payments and recover costs from suppliers. This counterparty body will report on its activities in its accounts. It will hold information and take decisions which affect the costs charged against the Framework. For example:

- information on projects that are offered contracts but withdraw before signature;
- information on projects that adjust the capacity they intend to develop; and
- decisions on contracts that are terminated.

For the Capacity Market, the Department plans to establish a government company to act as the settlement body for capacity agreements.

3.9 National Grid, the Contracts for Difference counterparty body, and possibly the Capacity Market settlement body, will be significant new stakeholders in the Framework. These bodies will have a role to play in determining actual and potential costs which will fall within the Framework. The Framework's governance arrangements will therefore need to be revised to ensure all major stakeholders in the operation of the Framework can coordinate their activities effectively and provide advice on controls and trade-offs.

Forecasting risks

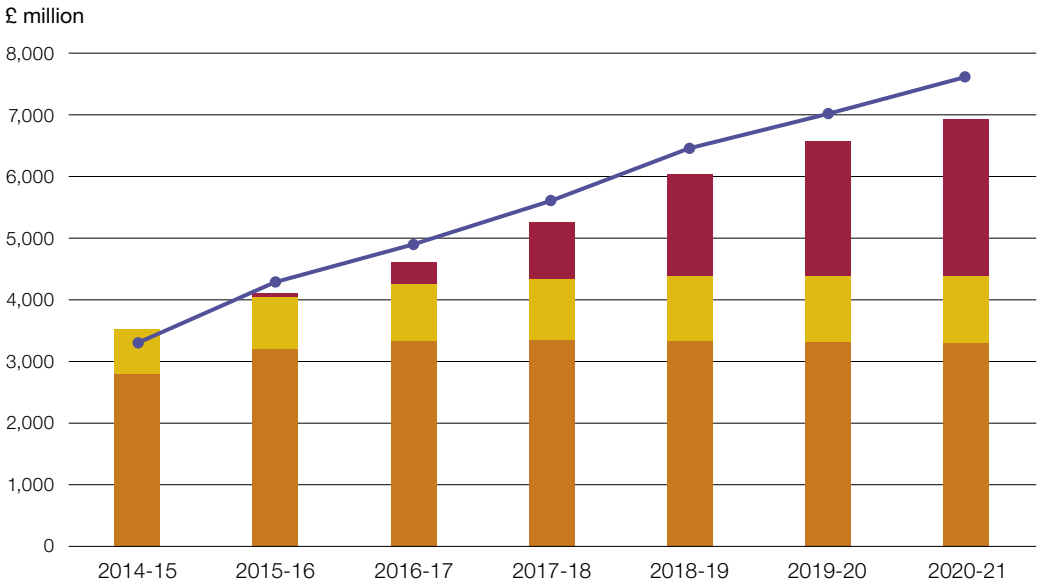
3.10 The Department and HM Treasury use forecasts when setting the overall Framework cap and budgets for individual schemes within it. They also use forecasts to estimate the adequacy of caps to support existing commitments and new spending under Framework schemes. Reliable forecasts allow the government to judge whether energy policy objectives are achievable within Framework spending caps. They also allow investors to judge whether Framework spending caps can support existing and planned investments. If forecasts are inaccurate or unreliable, the Department risks setting the caps too low, undermining investor confidence in the availability of support or too high, limiting the usefulness of the cap as a means of control.

3.11 The Department has invested in substantial and detailed modelling to forecast costs and outcomes of the Framework's electricity policy schemes, both to inform the setting of Framework caps and to inform ongoing control of scheme costs. In particular, the Department has acquired and developed the dynamic dispatch model (DDM) that models which electricity generating plant will be called upon, and when, to meet electricity demand, and the returns available to investors in different types of plant.

3.12 The Department used its DDM to support its calculation of the annual limits for the cap (in 2011-12 prices) for the years to 2020-21. It has also used it to forecast the impact of proposed strike prices for Contracts for Difference on investment in generating plant, assessing the potential impact on spending against the Framework cap and on achieving the Department's renewable energy and carbon reduction targets. The Department's central forecast is that 33 per cent of electricity will be from renewable sources in 2020-21 at a cost to the Framework in that year alone of £6.9 billion (**Figure 9** and **Figure 10**). The costs include support of £4.4 billion through the existing Renewables Obligation and Feed-in Tariff schemes, with the remainder from Contracts for Difference.

Figure 9

Annual spending on electricity policies within the Levy Control Framework is forecast to be £6.9 billion in 2020-21



	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Contracts for Difference		58	355	917	1,648	2,175	2,534
Feed-in Tariffs	726	834	924	999	1,051	1,079	1,096
Renewables Obligation	2,796	3,213	3,336	3,348	3,332	3,320	3,296
Total	**3,522**	**4,105**	**4,615**	**5,264**	**6,030**	**6,574**	**6,927**
Electricity policy upper limit	3,300	4,300	4,900	5,600	6,450	7,000	7,600

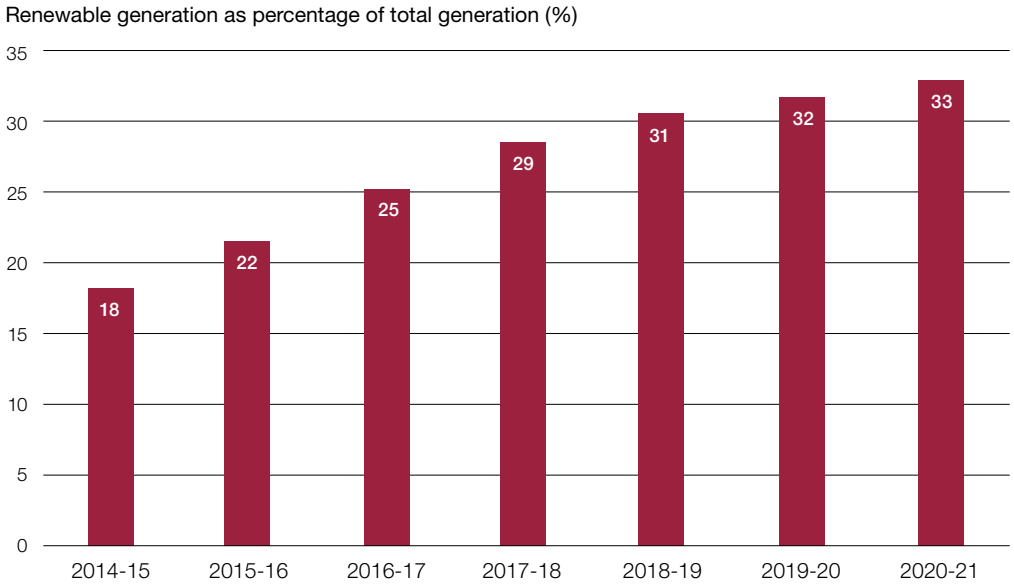
Note

1 These forecasts are taken from the June 2013 reference case runs of the DDM. The proportion of spending on the Contracts for Difference scheme as opposed to the Renewables Obligation is highly uncertain.

Source: Department of Energy & Climate Change

Figure 10

Renewable generation secured through Framework schemes is expected to reach 33 per cent in 2020-21



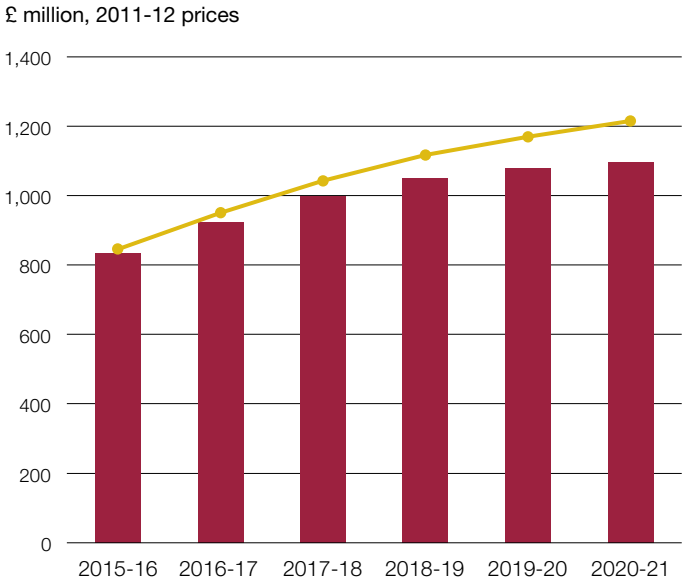
Source: Department of Energy & Climate Change

3.13 In calculating the annual limits for the cap (in 2011-12 prices) for the years to 2020-21, the Department did not use an updated run of its Feed-in Tariffs model alongside runs of its DDM. When assessing potential overall spending under the Framework, the Department included a spending trajectory lower than its Feed-in Tariff model had previously forecast (**Figure 11** overleaf). This means the Department may be underestimating Feed-in Tariff costs and overestimating the contingency within the cap. If over the coming years there are indications that spending on Feed-in Tariffs will exceed the available budget, the Department would need to act to mitigate the risk of breaching the overall Framework cap.

3.14 Working in conjunction with National Grid, the Department has developed and published a selection of scenarios illustrating how outcomes may vary in different circumstances. In all these published scenarios, the Department expects to remain within the cap and achieve its ambition for renewable electricity. Three core scenarios illustrate outcomes from different Contract for Difference strike prices. Further scenarios show the impacts of higher or lower reliability standards, technology costs 10 per cent above or below the central case for all technologies, and different fossil fuel prices. The Department expects its 'low fossil fuel price' scenario to deliver 31 per cent renewable electricity in 2020/21 at a cost just within the Framework cap.

Figure 11

The Department reduced its forecasts of spending on Feed-in Tariffs



	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
DDM Feed-in Tariffs June 2013 reference case	834	924	999	1,051	1,079	1,096
Feed-in Tariffs Phase 2B Impact assessments July 2012	846	950	1,043	1,117	1,170	1,215

Source: National Audit Office analysis of the Department of Energy & Climate Change's data

3.15 The Department has undertaken but not published further scenario analysis including some scenarios where Framework caps would be breached. However, the Department's scenario analysis does not systematically show the effects of varying individual input assumptions in the model or the relative probability of different scenarios. Hence the Department's analysis does not given an indication of the likelihood of its current policies achieving the ambition for 30 per cent renewable electricity by 2020 within Framework caps.

3.16 We examined the DDM as part of our study of infrastructure investment.[12] We concluded that design decisions in the DDM about how to model investor and generator behaviour appear reasonable and that overall it performs well in many areas. However, we also identified weaknesses which prevent us having the highest degree of confidence in the model forecasts. For example, we identified the need to improve quality assurance of the DDM. The Department has now commissioned an independent professional services firm to review the underlying formulae used in its model. Our full findings on the model are available on our website.[13]

12 Comptroller and Auditor General, *Infrastructure investment: the impact on consumer bills*, Session 2013-14, HC 812-I, National Audit Office, November 2013.

13 Comptroller and Auditor General, *Modelling the impacts of infrastructure investment on consumer energy bills*, Session 2013-14, HC 812-II, National Audit Office, November 2013.

Control risks

Existing measures

3.17 Under the Department's central forecast, the Renewables Obligation and Feed-in Tariffs continue to represent more than half of Framework spending on electricity policy measures until 2020-21. Much of their charge against the Framework has already been committed, so there is limited scope for exercising further control of these costs:

- Most of the controls on the Renewables Obligation have already been exercised through the 2012 banding review, and such controls as remain will have been exercised by the end of 2016-17. Thereafter, the costs of the Renewables Obligation will only vary as the level of renewable generation actually supplied by plants accredited through the scheme changes: for example, as load factor (the proportion of accredited plants' generating capacity that will actually generate electricity) varies or as accredited plants cease operating.
- The costs of Feed-in Tariffs for equipment already installed are fixed, subject to variation because of weather conditions. The extent of new commitments under the Feed-in Tariff scheme will depend on decisions on continued availability of the tariff and its rates. The Department has introduced a mechanism to automatically reduce tariffs available if take-up exceeds expectations as set out in Part Two.

Contracts for Difference

3.18 To remain within the Framework cap the Department will need to control the costs of the Contracts for Difference scheme. Once contracts have been awarded, their cost will be determined by the wholesale price of electricity and the load factor for the plant. The Department can therefore only control costs by estimating the likely costs of the contracts awarded and limiting the number and terms of the contracts entered into. The Department proposes to do this by setting budgets for Contracts for Difference for each year and requiring National Grid to direct the counterparty body to offer contracts. Up to April 2017, generation projects may either apply for accreditation under the Renewables Obligation or seek a contract under the Contracts for Difference scheme. The number of plants seeking accreditation under the Renewables Obligation will affect the availability of budget for Contracts for Difference in 2015-16 and 2016-17.

3.19 Once contracts have been entered into there will be no further controls and the cost of the scheme charged to the Framework will be determined solely by the wholesale price of electricity and the load factor for the plant. For example, a lower than expected wholesale price will mean a higher than expected charge from the scheme against the Framework. For consumers, this increase in levy spending should be offset by lower bills resulting from lower wholesale prices. In principle, the government could terminate these contracts, but such action would incur a financial penalty and would damage investor confidence.

3.20 The Department will need to understand the reasons for electricity price movements to control the costs of Contracts for Difference effectively. The wholesale price of electricity has historically been set by the costs of running gas or coal-fired power stations, determined largely by the global market for those fuels. In the future, fossil fuel power stations' running costs will also depend on the Carbon Price Floor, which sets a minimum price on carbon emissions from burning fossil fuels. Wholesale electricity prices are also likely to be volatile given their exposure to fossil fuel prices. In the future, the availability of low-marginal-cost renewables may drive the electricity price to, or below, zero at times of low demand. The Department will have to judge whether a forecast overspend against the contracts for difference budget is a temporary phenomenon driven by a short-term drop in the wholesale electricity price. Such a temporary phenomenon may not merit a pause in the award of new contracts.

3.21 The Department's proposals for allocating contracts provide flexibility for generators, which will make it harder for the Department to control costs and outcomes. National Grid will direct the counterparty body to award contracts after each allocation round based on the applications received from developers proposing renewable generation projects. The Department proposes to set a target 'commissioning window', a time period within each contract for developers to complete their projects. The Department will set this time period, but its start date will be based on the developer's application. The Department will also set a longstop date, after which an uncompleted project will face having its contract terminated. Depending on the length and start date of the target commissioning window, and the longstop date, the charge from a contract may begin in a number of different years. The Department has also proposed that developers may provide up to 10 per cent less than their initially agreed capacity without penalty, and up to 30 per cent less without losing their contract.

3.22 If a number of large projects commission later than expected or with lower than expected capacity, the Department may find that it significantly underspends and under-delivers in early years. But it will not be able to allow the award of new contracts to make up the shortfall because these would overcommit later years' budgets. Also, the Department is proposing that strike prices for new contracts will fall over time as capital costs of plant fall. Developers therefore have an incentive to apply at the earliest possible date to secure a contract at the highest strike price. This increases the risk that costs and outcomes slip backwards relative to expectations at the point contracts were allocated. The Department has recognised this risk and is proposing to apply penalties to those developers whose projects do not commission on time.

3.23 As well as setting an overall budget for Contracts for Difference, the Department may also try to control deployment of particular technologies by applying minimum and maximum limits on the capacity to be deployed or its cost. However, it may prove difficult to allocate projects with different commissioning years, so that budgets are used effectively.

Reporting risks

3.24 Given the difficulty of controlling the costs of contracts for difference, it will be important for the Department to report fully the latest forecast commitments against Framework caps. This should provide investors with as much clarity as possible over the amount of the cap available to support new investments. Without sufficient clarity and transparency, the Department risks deterring potential investors, which could reduce competition in the market. Capacity and costs may vary from the levels reported by the Department as generators take advantage of flexibility in how much they must deliver and when. And costs may vary from reported levels due to fluctuations in the wholesale electricity price. It will therefore also be important for there to be transparency of the Department's forecasting approach for committed costs, and the associated assumptions and sensitivities.

3.25 Introducing new government-owned bodies to administer Contracts for Difference and the Capacity Market also creates risks to the consistency of reporting. The counterparty body for Contracts for Difference and the settlement body for capacity agreements will be new government-owned bodies. Under the International Financial Reporting Standards, the counterparty body's liabilities from the Contracts for Difference will be reported through the Department's accounts. If investors and other stakeholders cannot reconcile these liabilities with reporting of committed spending relating to Contracts for Difference under the Framework, they may not have confidence in the Department's estimates of the support still available. The same will apply to the liabilities of the settlement body for the Capacity Market if the Department decides to include it in the Framework.

3.26 Reporting of Framework costs and outcomes will also need to be set within the wider context of their impact on consumer bills. When wholesale prices for electricity are low, payments under Contracts for Difference (and hence the levy cost of the scheme) will go up to ensure electricity generators receive the agreed strike price. But low wholesale prices should also result in lower energy bills for consumers. In its March 2013 report on the impacts of policies on energy prices and bills, the Department estimates that the cost of the Contracts for Difference scheme will add £30 to the average household's annual electricity bill in 2020. It also estimates that changes in the generation mix and capacity margins resulting from Contracts for Difference and the Renewables Obligation will reduce the wholesale price of electricity reducing bills by £16 in 2020. The Department estimates that overall the cost of schemes within the Framework will on average account for up to £90 of annual household electricity bills in 2020. But it expects the net impact of all existing government policies will be to reduce household electricity bills by an average of £72 in 2020 (**Figure 12** overleaf).[14]

14 Department of Energy & Climate Change, *Estimated impacts of energy and climate change policies on energy prices and bills*, March 2013, Annex E – Table E1. Table E1 shows the impact of policies on consumer bills per Mwh of electricity consumed. We have used that data to calculate the average cost of policies on an average household electricity bill on the basis of an annual electricity consumption of 3.03 Mwh in 2020.

Figure 12

The cost of schemes within the Levy Control Framework will account for up to £90 of the average annual household electricity bill in 2020

Policy	Electricity bill impact in 2020 (2012 prices) for a household consuming 3.03 megawatt hours of electricity each year (£)
Estimated bill without government policies	670
Cost of Contracts for Difference	30
Renewables Obligation	41
Feed-in Tariffs	14
Warm Home Discount	5
Total cost of schemes within the Levy Control Framework on average annual household electricity bill	90
Wholesale price effects	-16
Net effect of other policies	-146
Estimated bill with government policies	598

Notes

1 Other policies include the Carbon Price Floor, EU Emissions Trading Scheme, Green Deal and the Energy Companies Obligation, Smart Meters, Better Billing, Products Policy, and the Carbon Emissions Reduction Target as well as the impact of VAT at 5 per cent.

2 The Department's estimate of the impact of policies on bills does not include the costs or potential savings for consumers from the Capacity Market scheme in 2020.

Source: National Audit Office analysis of Department of Energy & Climate Change data

Appendix One

Our audit approach

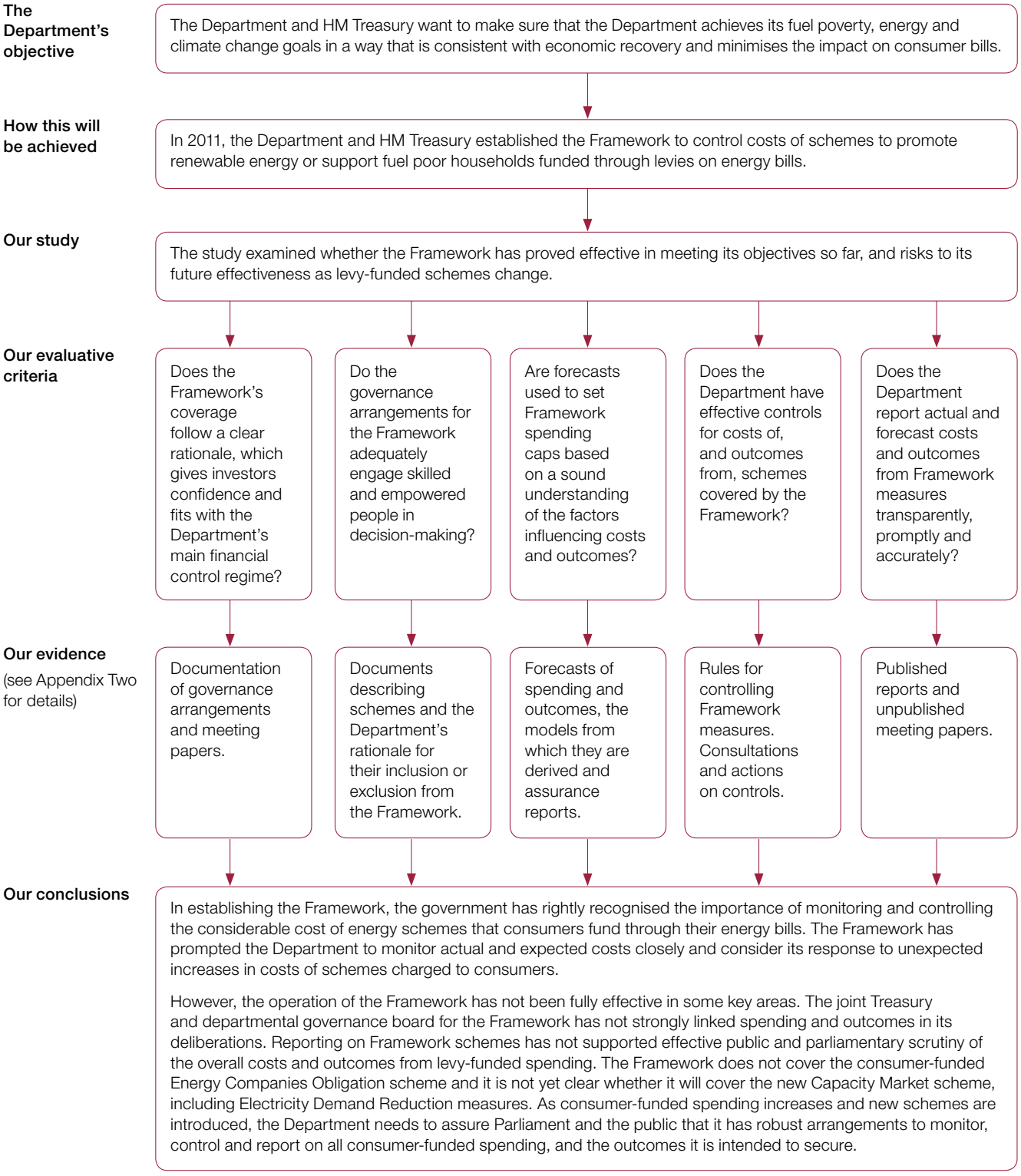
1 The Department of Energy & Climate Change (the Department) funds several schemes to promote renewable electricity generation or help vulnerable households with their energy costs through levies on electricity bills. We examined the government's control framework for this levy-funded spending: the Levy Control Framework (the Framework). We reviewed the Framework's:

- effectiveness so far; and
- risks to its future effectiveness.

2 The control of levy-funded spending is equivalent to the control of direct public spending. We therefore adopted evaluative criteria based on our financial management maturity model, which we have used to assess how government departments manage their direct spending. We set out these evaluative criteria in Figure 1.

3 Our audit approach is summarised in **Figure 13** overleaf. Our evidence base is described in Appendix Two.

Figure 13
Our audit approach



Appendix Two

Our evidence base

1 We reached our independent conclusions on the effectiveness of the Levy Control Framework so far, and the risks to its future effectiveness, after analysing evidence collected between May and September 2013.

2 We applied an analytical framework with evaluative criteria, which consider what arrangements would be optimal for operating a control framework for levy-funded spending. Our audit approach is outlined in Appendix One.

3 We assessed whether the Framework's coverage follows a clear and coherent rationale:

- We reviewed published and unpublished documentation about how the Framework was establishment.
- We examined documentation about how the Office for National Statistics classified schemes for statistical purposes.

4 We considered whether the Framework had established appropriate governance arrangements:

- We reviewed published and unpublished documentation about how the Framework operates, including terms of reference and membership of the levy control board and the minutes of the levy control board meetings.

5 We assessed whether the Department's Framework caps had been based on understanding factors influencing costs and outcomes:

- We reviewed the economic modelling used to inform decision making on the Framework caps against good practice, in particular the dynamic dispatch model identifying key assumptions and variables determining model outputs.
- We examined the Department's quality assurance of its modelling, including its scenario and sensitivity analysis.

6 We examined whether effective controls for Framework scheme costs and outcomes had been developed and used appropriately:

- We examined the Department's published and unpublished documentation on how it designed and operates controls for each of the schemes, including the Department's proposals for operating Contracts for Difference.

7 We identified whether actual and forecast costs and outcomes from Framework measures had been transparently, promptly and accurately reported:

- We reviewed Ofgem's arrangements for collecting, validating and reporting data on each of the schemes, examining Ofgem's audit strategies and relevant audit and assurance reports on suppliers' and generators' submissions.
- We examined documentation about the ONS methodology for calculating and reporting the cost of the Renewables Obligation and how the Office for Budget Responsibility reported and forecast costs of environmental levies.

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