

# Large-Scale Renewables: Policy and Practice Under Devolution

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## 2.1 INTRODUCTION

The 2014 referendum on Scottish independence has rightly crystallised attention on the renewable electricity sector. Increasingly portrayed as one of the success stories of renewable electricity, both within the UK and abroad, Scotland is committed to a dramatic increase in the level of renewable electricity technology (RET) deployment within a very tight timetable to meet one of the most ambitious electricity generated from renewable sources (RES-E) targets in the world: 100% equivalent of gross electricity consumption from renewable energy sources by 2020 (Scottish Government [2011](#)). This equates to the need to deploy 8 GW in 5 years, from around 8 GW of capacity in 2016. By all accounts a demanding target, so far all previous targets have been met on time or surpassed, including the 2011 target of 31% which was exceeded by 5% and the 2015 interim target of 50% (Scottish Government [2016](#)). In stark contrast, the UK was 2 years late in achieving the 2010 RES-E target of 10% (Department for Energy and Climate Change [DECC] [2013a](#)).<sup>1</sup>

Although the Scottish public voted no in the independence referendum, panic in the latter stage of the referendum by the three main

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pro-union political parties (Labour, Conservatives and Liberal Democrats) resulted in the offer of substantial new devolved powers to the Scottish Government. Set up to oversee the process to take forward devolution commitments on further powers, the Smith Commission swiftly published its recommendations for further devolution (Smith Commission 2014). With a number of the recommendations already legislated for in the Scotland Act 2016, understanding the context and the implications of the existing devolutionary settlement for renewable deployment going forward is critical before looking at the new powers and the potential implications for Scotland gaining additional control over energy policy and related areas (see in particular Chap. 10). Therefore, this chapter will look at the devolutionary settlement as it stood immediately prior to the Smith Commission.

Devolution is an important consideration in leading towards both a separation and divergence of powers, policy and practice with the emergence of an indigenous and increasingly confident Scottish renewable electricity policy. Devolution has also had a particular impact on Scotland, due to the greater powers devolved to the Scottish Government in contrast to Wales.<sup>2</sup> Equally important, however, and connected to the scope and use of devolved powers is the approach to RET deployment by the Scottish Government albeit with the caveat that overall energy policy remains a reserved matter to the UK Government in Westminster.

This chapter examines the development of Scottish renewable electricity policy under devolution and the implications of devolution for the deployment of large-scale RETs. As such, this chapter focusses on the divergence in policy and practice in the Scottish Government's approach to promoting large-scale RET deployment under devolution. This is all the more relevant given that the renewables sector is once again entering a new phase of radical reform with changes to the fundamental way in which large-scale renewable electricity technologies are promoted via the ongoing Electricity Market Reform (EMR) process. Introduced in April 2014, the Contracts for Difference Feed-in Tariff (CfD FiT) has already replaced the Renewables Obligation (RO) mechanism one year earlier than scheduled.<sup>3</sup> Furthermore, this chapter aims to add to the debate by clarifying the context in which decisions on a future Scottish renewable electricity policy must be based.

## 2.2 RENEWABLE ELECTRICITY DEPLOYMENT IN SCOTLAND

In the last 13 years, RET deployment has almost quadrupled to almost 8 GW of installed capacity and electricity generated from renewables accounts for 57.4% of Scotland's gross electricity consumption in 2015, overtaking all other power sources in terms of output including nuclear power (Scottish Government 2016). In a country with just 8% of the UK's population and 32% of its landmass, Scotland also accounts for around a quarter of UK capacity and 70% of RET deployment in the devolved administrations.

RET deployment capacity has increased year by year since the introduction of the RO in 2002. The main success story of Scottish RET deployment to date is onshore wind power. This one technology accounts for over two-thirds of total RET capacity in Scotland and 60% of total UK installed capacity (DECC 2016). Excluding hydro power, a legacy of the nationalised construction of large-scale reservoir dams after World War II, onshore wind accounts for almost 90% of all capacity, and almost 90% of average annual new-build for the period 2002–2015 in Scotland was for onshore wind farms. Despite the addition of only one new major hydro plant in the last 50 years, hydro power still accounts for a quarter of total installed capacity. By 2015, both onshore wind and hydro power also dominated RES-E generation, accounting for 90% of total generation output.

In stark contrast, the other technologies have shown limited deployment. This can be partly justified by reasons of technological maturity and resource availability. Onshore wind is one of the most mature and cheapest RETs with over two decades of deployment experience in the UK. Scotland has significant onshore wind resources, and technology development has increased over the years to utilise this through larger and more efficient turbine designs and associated increases in tower height. It is an obvious choice for government support and uptake by market participants. The opposite is true for marine renewables including wave and tidal power, despite Scotland having 10 and 25% of Europe's potential wave and tidal reserves, respectively. This is because they represent immature technologies primarily in the R&D or demonstration stage. For solar photovoltaic (PV), Scotland has significantly less solar radiation levels than the rest of the UK, and this technology is primarily subsidised through the small-scale feed-in tariff governed at the UK level by DECC. There is also only 358 MW (5% of total Scottish capacity) of

all biomass and waste technologies. Such limited deployment has been a consistent trend over the last 10 years and more and this is particularly the case in comparison with the UK overall, with around 5.2 GW of installed capacity. There are a number of reasons for this, including sustainability issues (CO<sub>2</sub> emissions and sourcing of biomass fuel-stock particularly from abroad) and the importance of biomass towards meeting the renewable heat sectoral target in addition to other parts of the economy.

With 25% of Europe's resource potential, offshore wind represents a key technology for the Scottish Government's strategic sustainable economic vision, with manufacturing, supply chain and job creation opportunities. It also has the potential to deploy at significant scale towards meeting the 2020 RES-E target and is perceived to avoid a number of barriers that have constrained onshore renewable deployment (particularly onshore wind) including planning, land use and public opposition. In contrast to onshore wind, though, there has been very little offshore wind deployment to date. Scotland has three operational offshore wind farms with an installed capacity of 197 MW, less than 5% of the total UK capacity for this technology of 5.1 GW with the majority located in English waters. However, again there are a number of reasons for this. Only 180 MW of capacity was located in Scottish waters out of a total of around 9 GW under the early Crown estate (CE) offshore wind leasing rounds (1 and 2). Subsequent leasing agreements did involve a higher proportion of Scottish sites but this occurred much later: Scottish Territorial Waters Round (2009) and Round 3 (2010). Importantly, the later rounds are planned in deeper waters farther from shore which increases the complexity, cost and time to develop the proposed projects.

### 2.3 WHAT HAS DEVOLUTION BROUGHT TO THE RENEWABLES TABLE?

Following a referendum on Scottish devolution held on 15 September 1997 by the then recently elected Labour Government, with 74% voting in favour of a Scottish Parliament, the legislative framework for Scottish devolution was set out in the Scotland Act 1998. Wales and Northern Ireland also voted in favour of devolution, although on different terms from the Scottish referendum (Ross 2012). Although the passage of the Act represented significant constitutional reform for the devolved administrations and the UK by kick-starting the devolution

process, the separate nations have always retained their respective identities. Since the Acts of Union united the Kingdoms of Scotland, England and Wales to form the Kingdom of Great Britain (GB) over 300 years ago in 1707, Scotland has always maintained its own distinctive identity, legal and education systems and other aspects of civic life. What devolution has in effect brought about, in the last decade and a half, is political decision-making on key issues to the respective nations at a lower tier of governance, although the degree of devolved powers varies between the administrations.

Under devolution, Scotland now has a Scottish Parliament and a Scottish Government (originally an Executive) sitting at Holyrood in Edinburgh. The legislative powers for energy and related areas are separated into reserved matters remaining under the full jurisdiction of the UK Government with all other matters not listed in the Act deemed to be devolved to the Scottish Government. As expected, constitutional and fiscal matters are reserved at the UK level. As mentioned previously, energy policy is also a reserved matter although, as will be argued below, control of centralised policy making is not so clear cut: rather than being set in stone (or more accurately in the Scotland Act 1998), the situation is somewhat more fluid. In general, however, this means that the generation, transmission, distribution and supply of electricity, the ownership of, exploration and exploitation of oil and gas deposits, coal (including its ownership and exploitation) and nuclear energy and nuclear installations are reserved to the UK Government (Paterson 2013). Devolved matters include the environment, planning and economic development.

Dividing responsibilities between the UK and Scottish Government in this way, however, does not lead to a clear separation of powers in practice. There are many factors that need to be considered in attempting to meet renewable energy policy objectives, particularly in the case where two countries have differing policy considerations. These include economic, technical, social, environmental and behavioural issues, often influenced by events both within and outside the UK. Energy policy, then, sits on the dividing line of powers and legally binding and non-binding obligations and targets. What needs to be remembered is that it is the UK, as the sovereign state, that holds key responsibilities for meeting targets: the EU 2020 and 2030 targets for renewable energy and climate change. As such, it is the UK Government, primarily through the DECC and the Treasury, that designs the wider electricity market

and the main subsidy mechanisms to promote renewable electricity, including the current RO to financially incentivise large-scale RES-E generation and the replacement CfD FiT mechanism via the ongoing EMR process. They also hold oversight responsibility for regulating both the energy sector and energy networks via the Office for Gas and Electricity Markets (OFGEM), a pan-UK independent energy regulatory body alongside other bodies including the CE and National Grid. It is also the UK Government that participates directly in negotiations at the international level on the direction of current and future energy relevant policy.

## 2.4 WHAT DOES THIS MEAN FOR SCOTLAND?

Devolution has resulted in the Scottish Government gaining a number of levers of control over the evolution of the future electricity generation mix and in addressing barriers to deployment. Often perceived as key barriers to increasing RET capacity, these include planning, renewable electricity incentives and the transmission network.

### 2.4.1 *Planning*

By transferring control over the onshore and offshore planning system, devolution has resulted in the Scottish Government gaining substantial control over realising its renewable policy objectives. The devolution of planning permits the Scottish Government to ultimately decide which types of power generation can take place within Scotland's territorial jurisdiction: coal plant (yes with strict caveats); gas and other thermal generation including biomass (yes with caveats); non-thermal renewables such as wind power (an unqualified yes) and new nuclear power (a definite no). With regard to major energy infrastructure, devolution has transferred powers to issue planning consent for onshore power stations with an installed capacity of 50 MW or above and power lines with a nominal voltage exceeding 20 kV or more from Westminster to Scottish Ministers. Onshore power stations and lines below these thresholds fall under the remit of the relevant local planning authority and the Town and Country (Scotland) Act 1997 applies. In relation to the marine environment, the Marine (Scotland) Act 2010 legislates for marine planning and licensing and conservation activities in Scottish inshore regions (0–12 nautical miles, or nm). The UK Marine and Coastal

Access Act 2009 executively devolved marine planning and licensing and conservation powers in the offshore region (12–200 nm) to Scottish Ministers.<sup>4</sup>

The devolved control of planning has enabled the Scottish Government to actively support certain RETs and mitigate planning problems to a greater extent than realised in other parts of the UK. This has been an important factor in the consistent growth of onshore wind capacity. Arguably, the most contentious renewable technology, primarily due to landscape and land use concerns (Nadaï and van der Horst 2010), RET deployment in Scotland is also dominated and currently dependent on this one technology. In Scotland, as with other parts of the UK, there is also growing opposition to the technology in the planning system (Warren and McFadyen 2010). This is not surprising. By 2012, there were already 160 operational wind farms in Scotland with another 152 under or awaiting construction and a further 235 pending a planning decision (Wood 2013). With a significant proportion of deployment required to meet the 2020 target anticipated to come from onshore wind, this technology has become a very emotive and politicised issue.

Acknowledging the increasing pressure of onshore wind on both the planning system and public opposition and the challenging 2020 target, the Scottish Government has used devolved planning powers to centralise control over the consenting process for a number of different types and scales of developments (Wood 2010). Whilst approval rates for wind farms that fall under the jurisdiction of Scottish Ministers (>50 MW installed capacity) averaged 87% over the period 2007–2012, approval rates for local planning authority consented projects (<50 MW) fell from 75 to 50% during the same period (Wood 2013). In contrast, although approval rates in England under the remit of the Secretary of State averaged 92%, local planning authority consented projects declined from 72 to 29% over the same period. Furthermore, the higher approval rate for >50 MW projects conceals the fact that England has significantly less operational onshore wind capacity than Scotland, around 40% (DECC 2016).

The Planning Etc. (Scotland) Act 2006 introduced a hierarchy of planning consisting of national (projects of long-term national significance), major (including generating plant with an installed capacity >20 MW), local (<20 MW capacity) and minor (permitted or given deemed planning permission) developments.<sup>5</sup> Scottish Ministers have potentially significant influence over any projects that fall within

the first three levels: the power to designate national developments through the National Planning Framework, the ability to call-in any national or major projects to speed up decisions, and direct any local developments to be dealt with as if it was a major development (Wood 2010). Scottish Ministers also play a role in the appeal process for major and local projects. Over the period from May 2007 to December 2014, 39% of wind turbine-related appeals referred to the government after an application was refused by a local planning authority were allowed (Scottish Government 2014). In contrast, the corresponding situation in England has become increasingly politicised with the Secretary of State for Communities and Local Government removing decision-making responsibility from local planning authorities. Out of 50 recovered projects which were at the appeal stage, only 10% have been allowed out of 19 projects where decisions have been reached with 5 projects previously recommended for approval by the Planning Inspectorate (RenewableUK 2014a). At the local planning authority level, the Scottish Government has also used spatial planning to designate areas specifically for onshore wind deployment, reaffirming the importance of the technology. The *Scottish Planning Policy* document requires planning authorities to determine suitable areas for >20 MW onshore wind farms (and to consider <20 MW projects) in development plans (Scottish Government 2010).<sup>6</sup>

Control of marine planning and licensing has granted the Scottish Government more effective powers for offshore RETs, enabling the creation of a one-stop shop for offshore wind, wave and tidal developers to obtain planning consent and relevant licences required to develop generating plants in Scottish waters (Scottish Government 2012a). Resulting in a more joined-up process that promotes close working relationships between developers and consulting bodies, this has simplified and streamlined the process for developers and regulators in comparison with the rest of the UK. Furthermore, the executive devolution of marine planning has enabled the Scottish Government to centralise control to a higher degree than that of the onshore planning regime. There are two main reasons. In line with the Electricity Act 1989,<sup>7</sup> virtually all offshore RETs will fall under the remit of Scottish Ministers. Sub-1 MW projects fall under the remit of the new statutory strategic regulator for marine-related functions in the relevant waters, Marine Scotland, a Directorate of the Scottish Government (Scottish Government 2015a). Essentially, Scottish Ministers will retain control over marine planning and licensing for all commercial-scale developments and initial small-scale projects,



with particular importance for early-stage marine technologies. However, the Scottish Government has no devolved powers over the granting of leases for offshore RETs, including half the Scottish foreshore and virtually all territorial waters out to 200 nm. This is governed by the CE, a UK-wide property portfolio owned by the Crown and governed by an Act of the UK Parliament (Crown Estate Act 1961) (Crown Estate 2014). As such, the CE plays a major role in the development of the Scottish offshore wind, wave and tidal stream energy industry although it is not involved in the planning and generation licensing process.

### 2.4.2 *Renewable Electricity Incentives*

Under devolution, the Scottish Government also acquired a degree of operational control over the ROS subsidy mechanism.<sup>8</sup> In practical terms, this primarily meant the ability to set subsidy levels for individual RETs that differed from those in the rest of the UK and changes to criteria determining the eligibility of RETs to receive subsidy via the mechanism. As a tool for supporting technologies, these powers have been used in innovative ways to great effect in Scotland to maintain investor confidence and policy stability for developers. Marine renewables have particularly benefitted from this approach. The provision of consistently higher subsidies for wave and tidal power technologies in Scotland under the ROS than was available elsewhere in the UK enabled the Scottish Government to overcome a somewhat *laissez-faire* attitude that characterised the UK Government's approach until recently.<sup>9</sup>

Indeed, the Scottish Government has been very proactive in both policy development and policy in practice to a greater extent than most countries engaged in this evolving sector. In recognition that marine renewables are typically at the prototype or demonstration stage (pre-commercial) and largely brought forward by small-sized companies, the Scottish Government has also funded initiatives from discretionary government spending to bridge the gap between research, design and development on the one hand and deployment and commercial operation on the other (Scottish Government 2015b). The Scottish Government also showed foresight in supporting the European Marine Energy Centre (EMEC) to bring forward device testing in real marine conditions and the £10 million Saltire Prize to drive innovation in the sector. With the global race to de-risk and commercially deploy these technologies, there are substantial economic benefits, in terms of both developing domestic

and export markets, to be realised from leading technological development and developing a viable marine renewables sector in comparison with the offshore wind (Wood 2010). Scotland has already positioned itself as a world leader, and this has enormous political benefit for the Scottish Government.

Another example of policy divergence between the Scottish and UK Government approaches is the new ROS only offshore wind technology bands offering increased subsidies for floating or innovative turbines and demonstration turbines. Proving these technologies would allow the more optimal utilisation of Scotland's offshore wind potential, the bulk of it in very deep waters far from shore (RenewableUK 2014b). Although DECC has ruled out separate subsidy support for these emergent technologies (DECC 2012a), this further highlights the capacity for policy innovation and experimentation at the sub-national level. Wave, tidal power and innovative or demonstration stage offshore wind turbines, however, are long-term technology options as evidenced by the very limited deployment to date. The Scottish Government has also used its devolved powers to both promote more stringent environmental objectives and maintain policy stability for those technologies it views as key to increasing capacity in the near-term. With regard to the former, the Scottish Government has made clear its preference for biomass to be utilised for heat or combined heat and power (CHP) generation by setting stricter eligibility criteria to include sustainability issues (CO<sub>2</sub> emissions and sourcing of biomass fuels particularly from abroad) and changes to the subsidy offered under the ROS for certain biomass technologies to limit greenhouse gas (GHG) emissions, meet non-power renewable targets and protect other key industries (Scottish Government 2012b). Regarding the latter, when the UK Government immediately launched an unscheduled banding review seeking further cuts to onshore wind after having already reduced subsidy levels by 10% in 2012, the Scottish Government acted decisively to rule out further cuts and guarantee support until 2017 (Pinsent Masons 2012). Although the UK Government ultimately decided not to impose additional cuts, the proposal alone created uncertainty with the decision pending for over a year (DECC 2013b). This is important. Without short-term certainty and longer-term visibility that render financial and political risks reasonably predictable and manageable, projects will not be as viable or attractive and this could impact on deployment (Plant 2013). With recent studies indicating between 675 and 1200 MW of new hydro potential in

Scotland, the Scottish Government also diverged from the UK position by ruling out cuts to hydro power in contrast to a cut of around a third of subsidy under the RO (Pinsent Masons 2012).

However, two recent developments at the UK level have stripped the Scottish Government of its powers over the operation of renewable electricity mechanisms. Firstly, section 55 of the Energy Act 2013 contained provisions for the Secretary of State to close the RO from 31 March 2017, enforceable from the Act entering into law.<sup>10</sup> The point here is not that the mechanism would be closed or at that specific date, this was known since the early stages of the EMR process, but rather that the UK Government, without any prior consultation or discussion with the Scottish Government, removed Scottish Ministers and the Scottish Parliament of powers and discretion already granted under devolution. Anyway, this point became moot when the UK Government, without warning, closed the RO one year earlier than scheduled. This action also had the practical effect of undermining the introduction of the new bands for floating and demonstration turbines, with the Scottish Government having to seek clarification from Westminster in order to assuage investor concerns (Scottish Government 2013). Secondly, the CfD FiT is a more centralised mechanism to financially support RETs than the RO (Energy and Climate Change Committee 2012). By design, the Scottish Government has none of the control over the new mechanism that it used to have under the ROS: it cannot include or exclude technologies, set the subsidy level (or strike price under the CfD FiT) and has no power over the process of contract allocation for new projects.

The significance of this cannot be over-emphasised. It removes virtually all control over the renewable electricity subsidy mechanisms. It is also important to recognise that despite well-documented concerns with the RO, specifically due to the type, design and operation of the mechanism (Wood and Dow 2011), the Scottish Government has never had the devolved competence or influence to address these fundamental issues. The main point here is that despite devolution, the Scottish Government cannot replace or fundamentally change the design of the mechanism. That is the prerogative of the UK Government. Furthermore, there is to be no socialisation of costs under the CfD FiT with regard to the setting of different subsidy levels for RETs in the devolved administrations (DECC 2012b). Where energy policy has been fully devolved in the case of Northern Ireland, the Northern Ireland Executive (NIE) has adopted the new mechanism in full to be administered on a UK-wide basis (Department of Enterprise, Trade and Investment 2014). In addition,

although the NIE does have the ability to set different strike prices to reflect different market arrangements, it has agreed to the GB-wide strike prices (Northern Ireland Executive 2013). The alternative would be for additional costs to be met only by consumers in Northern Ireland and not across the UK as was the case under the RO. Yet the socialisation of costs was a key debate and potential stumbling block in discussions of Scottish independence. As with Scotland, the end result is the same, with innovative approaches to supporting RETs by the devolved administrations being effectively ruled out.

This also leads to the issue of how to support expensive technology options requiring long-term financial and policy support including offshore wind and marine RETs when they reach commercial-scale deployment. In particular, there are a number of challenges of a technical, economic, social and environmental nature that face offshore wind not just in Scotland but in the UK and abroad, including policy risk (Wood 2010). Both the UK and Scottish Governments have agreed to the need to reduce technology costs by a third by 2020 (Offshore Wind Cost Reduction Task Force [OWCRTF] 2012). However, contrary to the deployment experience from earlier CE rounds, costs have escalated from the mid-2000s and reductions are expected to occur only gradually to the mid-2020s (OWCRTF 2012). The downward trend in costs will only be achieved if supply chain constraints are addressed alongside the technology, construction, regulatory and financial de-risking of offshore wind through research and development and demonstration as deployment moves into deeper waters further from shore. This will require a concerted and sustained effort by all stakeholders involved in the sector: the UK Government, the devolved administrations and other countries within the EU and beyond, regulatory and other statutory bodies, developers (typically multinational and often state-owned to some extent) and supply chain companies, non-statutory organisations and the public who ultimately will pay for sector development through their energy bills (OWCRTF 2012). Critically, not all of the barriers to deployment lie within the Scottish Government's jurisdictional control.

However, policy risk at the UK level is threatening to derail offshore wind deployment in Scotland, with the sector recently hit by a number of setbacks for proposed projects across the UK. This is in addition to capacity attrition of other projects due to various reasons including public objections, technical and environmental concerns. Although not all of the cancellations are due to political or policy risk, key players in

the sector have either cancelled or halted commitments to develop projects post-planning consent being obtained. This decision appears to have been taken mainly in response to the considerable political debate between the UK Government and the major energy companies over energy prices rises and the impact on the affordability of customer bills and uncertainty due to the EMR and lack of a post-2020 target.<sup>11</sup> The implications for the Scottish offshore wind sector are profound, with at best the delay and at worst the loss of around 3.6 GW of directly proposed capacity and billions in investment. If the total capacity offered for the Firth of Forth Round 3 zone is taken into consideration, this figure increases to almost 5 GW or a third of the 2020 target. Currently, only the Beatrice offshore wind project has been awarded a CfD FiT agreement, representing only around 600 MW. This has also negatively impacted on the Scottish Government's plans to more than double biomass power capacity in Scotland, with over 400 MW cancelled, despite half the capacity already receiving planning consent from the minister, essentially due to the same reasons stated by developers for the proposed offshore wind farms (BBC 2014). This also gives a strong indication of the highly political nature of energy policy in the UK.

### 2.4.3 *Electricity Network*

The transmission and distribution network is also considered a key barrier to deployment, with an unprecedented amount of grid capacity required to connect new renewables (Electricity Networks Strategy Group [ENSG] 2009). Grid problems will particularly affect onshore wind farms but increasingly offshore wind and future marine renewables as they continue to be deployed at scale. This means mostly onshore wind farms but with implications for offshore wind and future marine renewables. However, with the exception of planning, the Scottish Government has very little power over either the onshore transmission or distribution networks. It has no regulatory powers to allocate new upgrades and extension of the network, or change access rules to the grid or the charging regime. As the pan-UK energy regulator of the single GB electricity system, this is the remit of OFGEM with an important role for National Grid as the system operator (OFGEM 2014). Furthermore, on the policy and legislative side, it is DECC that introduces grid reforms and not the Scottish Government. As with the payment of subsidies for renewable energy, one of the key benefits of this approach is that the costs of building and maintaining the networks are

socialised across GB. This is an important point given that the majority of the work going forward is to be located within the boundaries of Scotland (ENSG 2009).

Although OFGEM and DECC have been proactive in increasing network capacity, particularly in Scotland which is currently heavily congested, and implementing reforms such as the connect and manage regime to speed up connection times, the protracted debate on locational charging between the Scottish and UK Governments highlights this issue (The Guardian 2013). Locational charging, reflecting the cost of transporting power, imposes higher costs on Scottish generators compared to generators in the south of England due to being located farther from the area of greatest demand in the south of England; some generators receive subsidy due to being located in southern England. Although the Scottish Government has not formally been able to amend this, as part of the UK it has been able to influence thinking and OFGEM announced a change to the charging methodology in August 2013.<sup>12</sup> Another example of the disjointed devolution of powers that further highlight the arbitrary nature of energy devolution is the differences in strategic planning over the onshore and offshore electricity networks. As McHarg (2014: 1) states, ‘*Why should [the Scottish Government] be able to plan the development of offshore electricity networks, but have no equivalent powers over onshore networks?*’

In practical terms, then, despite overall energy policy being reserved to Westminster, substantial areas of energy policy have been devolved. The extent of existing devolved powers to Scotland, however, is largely piecemeal, and there is no guarantee that these powers will not be removed. Devolution has therefore not led to a black-and-white repertoire of powers. The Scottish Government does have the potential to exert influence over energy and renewable deployment at the Scottish-specific level. The crucial question is how much influence does the Scottish Government possess in the sphere of renewable technology deployment? Just as important, how is that power used? In a very real sense, devolution has both provided and legitimised the ‘*space*’, whereby Scotland and the other devolved nations now at least have the potential to create their own energy policy, albeit constrained by the boundaries of devolution. Importantly, as these boundaries are not set in stone, the devolved administrations have the opportunity to engage with policy implementation and processes in Westminster through intergovernmental bargaining and negotiation at the formal (consultations, setting targets and producing policy documents) and informal (dialogue, behind

the scenes agreements) level (Cowell et al. 2013). Devolution has also allowed the devolved administrations to set out their own distinctive policy strategies and priorities on the issue of renewable energy.

## 2.5 DIFFERENT VISIONS AND DIVERGENT APPROACHES IN SCOTLAND AND THE UK

There is no doubt that formal and informal devolved powers are important. However, recent research investigating the impact of devolution on the promotion of renewable energy in the UK has shown that it cannot fully explain the different levels of success in increasing deployment: ‘... simply possessing “powers” in the narrow legal or administrative sense may be of limited relevance without a disposition, capacity or will to deploy them in an effective manner for renewable energy. In short, “powers” is an insufficient explanation’ (Cowell et al. 2013: 2). Political support can be just as important, and there are reasons why this is particularly the case for renewable electricity.

In general, RETs are relatively expensive technologies to deploy (in terms of capital and operational expenditure), and they face a number of barriers to deployment fairly unique to this technology category: some technologies, like wind power or large-scale hydro, can have significant impacts on landscape and land use, whilst biomass can cause particulate pollution and result in unsustainable forestry practice. Other technologies are regarded as immature with limited deployment experience, including wave and tidal power, and offshore wind. Because of the novel characteristics of these technology options, in addition to their small capacity factors requiring relatively large individual plant sizes (in terms of square metres), resulting in the need for more developments than conventional power sources like fossil fuels and nuclear power, political support is arguably a critical prerequisite for the promotion of renewable energy. In other words, a stable and coherent political strategic vision is required to overcome a number of challenges given the current need for financial, policy, legislative and regulatory support for the majority of such technologies.

Upon winning the 2007 Scottish elections, the SNP immediately set renewable energy as one of its core priorities and objectives in delivering ambitions for a greener Scotland in order to achieve sustainable economic growth (Scottish Government 2007). Based on the substantial potential of Scotland’s onshore and offshore renewable reserves, the economic strategy of the Scottish Government was to become the ‘Saudi

Arabia' of renewable energy with the potential to deploy up to 60 GW of renewable electricity capacity, more than 10 times current peak demand (Business Green 2008). The distinctive Scottish emphasis on renewable energy has been consistently reiterated and reinforced through a cohesive and stable vision going forward. This vision has been backed-up and developed by various policy documents including the *Electricity Generation Policy Statements* and the *2020 Routemap for Renewable Energy in Scotland* alongside additional Scottish-specific initiatives to promote renewable deployment.

In contrast, the previous UK Coalition Government (the Conservatives and Liberal Democrats) vacillated between support for nuclear power, shale gas, carbon capture and storage and renewables, and the election of a majority Conservative Government in 2015 looks unlikely to change this: indeed, they appear more stable at least in terms of showing less confliction and desire for supporting renewables. Nuclear power and shale gas benefit the most from political support, as evidenced by the tortuous EMR process over the last 5 years which seems to be an attempt to underpin new nuclear build whilst avoiding the appearance of subsidising it and the almost gung-ho push for a rapid expansion of shale gas extraction based on US success in exploiting its domestic resources. It is clear that political motivation to support renewables falls far short of that on offer for other 'chosen' technologies. The bitter rift between the two Coalition parties over the future of onshore wind, with the Conservative Party's proposal to cap the future capacity of the technology, is one such example. From the laudable but utterly vague slogan of becoming the 'Greenest Government Ever', in the space of just 4 years the Coalition increasingly moved towards supporting nuclear power and fossil fuels through strong policy commitments, financial incentives and addressing regulatory barriers to their deployment.

## 2.6 CONCLUSION

Two key points can be made from reviewing the existing devolutionary settlement regarding RET deployment in Scotland. First, devolution has resulted in significant benefits for the Scottish Government in realising its renewable energy ambitions, in terms of policy and practice. This can be seen in the approach to making full use of planning



functions and tailoring the ROS subsidy mechanism to promote those technologies seen as particularly important to Scottish ambitions, including onshore and offshore wind and marine technologies. Such initiatives have also been driven by consistent and stable policy aims and objectives as Scotland seeks to carve out a distinctive Scottish-specific energy policy. Even in areas where control lies firmly within the jurisdiction of pan-UK institutions, for example in decision-making over where and when to upgrade the electricity network, the Scottish Government has been particularly vocal and determined, although network enhancement is also of advantage to the UK as well.

Second, it is also clear that devolution has not resulted in a clear demarcation of powers between Westminster and Holyrood. This is to be expected due to the complex and systemic nature of energy issues, the different policies and strategic aims that exist at the sub-national level and the national level, and the fact that Scotland remains a part of the UK. However, despite the ongoing process of devolution (prior to the Smith Commission) resulting in Scotland gaining legislative competence and the legitimised capacity to influence UK energy policy from a Scottish perspective, this has produced an existing devolutionary settlement for renewable energy and indeed wider energy issues that is largely individualistic, piecemeal and arbitrary in terms of what is reserved to the UK Government and what is devolved to the Scottish Government. Of further concern is the removal of existing devolved powers by Westminster and the lack of a guarantee that any of the remaining powers will not be clawed-back at some future date, particularly with the introduction of the CfD FiT mechanism where virtually all control already lies in the hands of Westminster. Surprisingly, there does not appear to have been any real discussion of the appropriate balance between devolved and reserved powers with regard to what would be optimal in terms of policy delivery of RETs. The reason why this is surprising is obvious, given the important contribution of Scottish-based RET deployment to domestic and international renewable and climate change targets, energy security, economic and employment issues at the devolved and overall UK level. Surely, a comprehensive and cohesive set of devolved powers over renewable electricity would be advantageous not only to Scotland but also to the UK overall. At the very least, it is an issue that should be investigated further.

## NOTES

1. It should be noted that all the chapter contributions were completed with final corrections in June 2016 prior to the new Conservative government coming to power with Theresa May as Prime Minister and the now new Department of Business, Energy and Industrial Strategy (BEIS).
2. Energy policy is already fully devolved to Northern Ireland.
3. At the overall UK level, the current subsidy mechanism is collectively called the Renewables Obligation (RO). In practice, they refer to three complementary obligations with different legal basis and variations in subsidy levels and eligibility criteria. These are the Renewables Obligation Scotland (ROS, Scotland), Renewables Obligation (RO, England and Wales) and the Northern Ireland Renewables Obligation (NIRO, Northern Ireland).
4. Onshore and offshore developers are required to apply for section 36 (power station) or section 37 (power line) consent from Scottish Ministers under the Electricity Act 1989 to construct, extend or operate a generating plant. Onshore developers must also apply for planning consent; in contrast, separate planning permission is not required to be obtained by applicants for offshore generators as section 36 consents and marine planning and licensing are considered together. Furthermore, developments with a capacity of 1 MW or less are exempt from section 36 requirements.
5. The Planning Etc. (Scotland) Act section 5.
6. This is important as the development plan is the basis of decision-making in the planning system; effectively what is not included in the development plan should not be granted consent (see Scottish Government 2010).
7. Electricity Act 1989 section 36.
8. The Renewables Obligation (Scotland) Order 2002, SSI 2002/163.
9. Differentiated support was provided even prior to the introduction of technology banding under the RO, through the Scottish-only Marine Supply Obligation which ran from 2007 to 2009. (cf. Wood 2010).
10. The Renewables Obligation Closure Order 2014, SI 2014/2388.
11. Key companies include Scottish and Southern Energy, Scottish Power, Centrica, DONG Energy, E.ON, RWE Innogy, Statoil, Statkraft and Masdar (cf. Scottish and Southern Energy 2014).
12. Although the new measures have not removed locational charging, the cost of transmission charges will be lower for Scottish generators than under the previous methodology (cf. OFGEM 2013).

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