

# **Marine Renewables Financial Support Options**

Brodies LLP

17 December 2021



**TABLE OF CONTENTS**

Introduction ..... 1

Approach ..... 1

1 Description of the Options ..... 2

2 Powers of the Scottish Parliament and Scottish Government..... 3

3 Subsidy Control ..... 6

4 Approach to Allocation of Support ..... 10

5 Advantages and Disadvantages of the Options ..... 11

6 Conclusions ..... 13

## **Marine Renewables**

### **Financial Support Options Available to the Scottish Government**

#### **Introduction**

The Scottish Government has committed to achieving net zero emissions by 2045, five years ahead of the UK target. While Scotland has significant renewable sources of energy, and the UK Government has developed a range of financial support tools, in order to achieve net zero by 2045, Scotland may need to develop its own complementary financial support tools. In particular, tailored financial support tools could boost emerging technologies which could play a key role in decarbonising Scotland's economy, such as tidal energy.

We have been asked to analyse financial support mechanisms that might be available to the Scottish Ministers to support deployment of marine energy projects in Scotland and, in particular, supporting early stage deployment to put marine projects on a pathway to compete with other renewable technologies. We have been asked to focus on mechanisms that provide revenue rather than capital support and mechanisms that would be complementary to the UK Government Contract for Difference scheme, recognising that marine energy projects will benefit from a ring-fenced budget in the fourth CfD allocation round.

We have considered three proposed mechanisms:

- Variable Revenue Support (VRS)
- Scottish Dispatchable Power Agreement (DPA)
- Scottish Government Power Purchase Agreement (PPA)

#### **Approach**

In this paper, we describe each of the schemes in outline, focussing primarily on the legal characteristics of the schemes, in order to inform an analysis of whether the Scottish Government – or Scottish Parliament – has the powers to implement the proposed scheme. We have not considered the policy detail for each of the schemes. This is something which would be done once one of the schemes is identified as the preferred option.

Analysing the schemes from a legal perspective involves three key tasks. First, designing (in outline) the proposed scheme and its legal characteristics. Second, determining whether the Scottish Government – or the Scottish Parliament – has the powers available to it to implement the scheme. Third, assuming the powers to implement the scheme exist, assessing whether the scheme is permitted by the subsidy control regime.

The structure of this paper follows these three tasks, with three further sections, one assessing the options for allocating financial support, one summarising the advantages and disadvantages of the proposed schemes, and finally one setting out our initial conclusions.

## 1 Description of the Options

### Option 1: Variable Revenue Support (VRS)

- 1.1 A variable revenue support grant agreement between an electricity generator and the Scottish Government. This would operate in a similar manner to a UK contract for difference. The generator receives the difference between an agreed fixed price and the reference price when the fixed price is below the reference price and makes a payment when the fixed price is above the reference price. The objective is to transfer power price risk from the generator to the Scottish Government for the period of the contract.
- 1.2 The reference price would be a UK market power price. The fixed price could be set by auction, or it could be administratively set.
- 1.3 Financially, it would operate in a manner similar to the UK CfD and could support private network connections (for example, to a hydrogen electrolyser) as well as connections to the grid.
- 1.4 The VRS would be directly funded from Scottish Government budget and not through levies on electricity bills. It is intended to be a financial instrument that guarantees a fixed price for electrical output from a supported project with a clawback where market prices are higher than the fixed price.

### Option 2: Scottish Dispatchable Power Agreement (DPA)

- 1.5 An agreement between an electricity generator and the Scottish Government under which the generator would provide dispatchable power, that is, power provided by generation plant that is able to respond to increases in demand, either to switch on (like pumped hydro) or to be turned up (like gas powered generation). Generators would receive an availability payment plus a volumetric payment. The availability payment is a fixed amount based on the generating station being available over time and is a payment for services. The volumetric payment is paid in respect of the power generated from the generating station and is intended to reflect the additional costs of generating power from the dispatchable plant over and above an unabated gas fired power station. The volumetric payment is a top-up payment. The intention is that this payment will 'promote' the abated plant ahead of an equivalent unabated plant in the merit order.
- 1.6 The purpose of this mechanism is to support dispatchable power and therefore could potentially be used to support a combined marine turbine plus storage project. It would not be suitable for projects without storage because wave energy is intermittent and, while tidal energy is predictable, it is not available at all times when power may be required.

### Option 3: Scottish Government Power Purchase Agreement (PPA)

- 1.7 An agreement between an electricity generator and the Scottish Government under which the generator would sell power and the Scottish Government would buy that power at a fixed price. The fixed price would be set at a price expected to be a premium to the market price and would be set similar to a CfD strike price. This model is similar to the well-established corporate PPA except that the fixed price is likely to be at a premium to the market price. Scottish Government would need to work with a licenced electricity supplier to 'sleeve' the PPA and provide balancing services similar to a corporate PPA.

## 2 Powers of the Scottish Parliament and Scottish Government

- 2.1 The Scottish Parliament is set up under the Scotland Act 1998 and has powers to legislate on devolved matters. It does not have the power to legislate on reserved matters. There are therefore limits on the powers of the Scottish Parliament to legislate to create a support scheme for the renewables sector.

### *The Powers of the Scottish Parliament*

- 2.2 The Scottish Parliament may not pass legislation that relates to "*generation, transmission, distribution and supply of electricity*" or that relates to the "*subject-matter of Part II of the Electricity Act 1989*". Part II of the 1989 Act concerns the reorganisation of the electricity boards and privatisation and is not relevant to this note.
- 2.3 Whether legislation to create a support scheme for renewable energy would amount to legislation that relates to the generation, transmission, distribution or supply of electricity is not completely straightforward. At a very basic level, any such legislation would have a connection with the generation of electricity. However, the test of whether legislation passed by the Scottish Parliament "relates to" a reserved matter for the purposes of the Scotland Act 1998 involves going beyond what might look like the obvious answer.
- 2.4 The 1998 Act provides that the question is to be judged by looking at "the purpose of the provision, having regard (among other things) to its effect in all the circumstances". There is a growing body of caselaw from the courts, including the UK Supreme Court, in which the question of how to judge the purpose of an Act of the Scottish Parliament (or provisions of an Act) has been examined. The general approach of the courts has been to take a relatively 'generous' approach to the Scottish Parliament's powers and the question of purpose: so, for example, legislation to increase the penalties to be imposed for road traffic offences was not reserved because its purpose was reform of the criminal justice system (devolved) and not the amendment of road traffic legislation (reserved) and the purpose of legislation to place restrictions on the packaging and visibility of tobacco products was to promote public health (devolved) and not to regulate the sale and supply of goods to consumers (reserved).
- 2.5 The argument in favour of the Scottish Parliament having the power to create a renewables support scheme is that the purpose of the legislation would be the promotion of environmental protection, carbon reduction and sustainability. That argument would be strengthened if, for example, the scheme is a temporary scheme directed at enabling new renewables technologies to reach the stage of commercialisation rather than, for example, being intended to involve a substantial and/or long term intervention in the market for electricity generation. Much would depend on the way in which the scheme is designed: at this stage we simply highlight the risk that an Act of the Scottish Parliament to create a regime for subsidies for renewable energy generators might be viewed as relating to the generation of electricity and for that reason not within the powers of the Scottish Parliament.

### *The Powers of the Scottish Ministers*

- 2.6 The Scottish Ministers have various powers under existing legislation to provide financial assistance for a range of purposes. Those powers have, in some cases, been created under new legislation after devolution. In other cases, the powers have been 'inherited' as a result of the general transfer of functions that took place on devolution and as a result of further transfers that have taken place since then.
- 2.7 The most obviously relevant existing powers are those conferred by section 153 of the Environmental Protection Act 1990. Section 153 empowers the Scottish Ministers to give financial assistance to, or for the purposes of, a range of specified organisations and programmes. Those include the joint inter-Governmental panel on Climate Change of the UN Environment Programme and the World

Meteorological Organisation, the UN Framework Convention on Climate Change and the Low Carbon Infrastructure Transition Programme.

- 2.8 The Scottish Ministers can add, by statutory instrument, to the list of programmes and organisations for which it can provide financial assistance under section 153. It can add "any description of organisation, scheme, programme or international agreement whose purposes relate to the protection, improvement or better understanding of the environment". So, in principle, the Scottish Ministers could add a new scheme to the section 153 list. Financial assistance is to be given "in such form and on such terms" as the Ministers may think fit.
- 2.9 However, the power to give assistance under section 153 is not completely unlimited. The same limits on what the Scottish Parliament can do in terms of passing legislation also apply to the exercise of Scottish Ministers' functions. So, the giving of financial assistance under section 153 would be problematic if that assistance was characterised as "relating to" the generation of electricity. We are aware however that the Scottish Ministers have used section 153 to provide financial assistance to projects that involve the generation of renewable energy.
- 2.10 As well as the general transfer of functions that took place on devolution, the Scottish Ministers have a range of specific powers conferred on them by UK legislation. In particular, a large number of functions that are not generally 'devolved' have been specifically transferred to the Scottish Ministers. Those include a range of functions under the Electricity Act 1989 that would otherwise be exercised, in relation to Scotland, by the UK Government.
- 2.11 Functions in relation to subsidies and support for industry have also been transferred to the Scottish Government. For example, there are powers under the Industrial Development Act 1982 to provide selective financial assistance for industry in particular areas and those powers are now exercisable by the Scottish Ministers in relation to financial assistance for shipping services carrying passengers between the Highlands and Islands and Northern Ireland.
- 2.12 We have not identified any of these specifically transferred functions that would provide a basis for Scottish Government action in relation to a subsidy scheme for renewable energy.

### **Option Specific Analysis**

#### **Option 1: Variable Revenue Support (VRS)**

- 2.13 *Legal Characteristics.* VRS would be provided through a private law contract. It is a financial contract in which the Scottish Government (or another public sector entity included in the scheme) would have an obligation to pay a defined sum to a generator contingent on whether the fixed price is higher than the reference price. The Scottish Government would not receive any service or product in return, and no assets would change hands. Upon entering into a VRS contract, the Scottish Government would typically expect to make a loss over the duration of the contract.
- 2.14 *Scottish Parliament powers.* The Scottish Parliament does not have the power to require electricity suppliers in Scotland to fund the Scottish Government's liabilities under a VRS contract, nor the power to permit suppliers to apply a levy to consumer electricity bills. Electricity supply and the sale and supply of goods and services to consumers are reserved matters. As a result, unlike the UK CfD, a VRS mechanism could not be funded from consumer levies and would require to be funded from the Scottish Government budget and its own tax raising powers.
- 2.15 *Scottish Ministers' powers.* A VRS mechanism could be funded using the powers conferred on Scottish Ministers by section 153 of the 1990 Act, subject to the issue identified earlier about whether

such assistance is to be characterised as relating to the generation, transmission, distribution or supply of electricity.

### Option 2: Scottish DPA

- 2.16 *Legal Characteristics.* A DPA is a private law contract. It is a contract in which the Scottish Government would have an obligation to pay two separate amounts: (i) a fixed sum (per month) conditional on the generating project being available to generate electricity (effectively a payment for services); (ii) a top-up payment in respect of the power generated from the generation station reflecting the additional cost of generating power from this generating station compared to unabated gas fired power stations. The Scottish Government would not be the recipient of the service<sup>1</sup>, or the power generated, and no assets would change hands.
- 2.17 *Scottish Parliament and Scottish Ministers' powers.* The analysis is the same as given above in relation to VRS. However, some additional consideration may be required to assess whether the public procurement rules would be triggered if the DPA is characterised, in part, as a payment for services, albeit those services are effectively provided for the benefit of the electricity network.

### Option 3: Scottish Government PPA

- 2.18 *Legal Characteristics.* A PPA is a private law contract. It is an agreement in which the Scottish Government would have an obligation to pay for power generated by the generating station at a fixed price. That fixed price is likely to be higher than the market electricity price, on average. Therefore, upon entering into the PPA, the Scottish Government would typically expect to make a loss over the duration of the PPA.
- 2.19 *Scottish Parliament and Scottish Ministers' powers.* The analysis is the same as given above in relation to VRS.
- 2.20 However, there is an additional constraint on Scottish Ministers' powers in relation to this option. On the face of it the purchase by the Scottish Ministers of electricity would be a contract subject to the public procurement rules that require Ministers to advertise the opportunity and to run a competitive process for the appointment of a supplier. The public procurement regime would ordinarily require the selection of the most economically advantageous tender – presenting a potential obstacle to the purchase of electricity at a premium over market value.

---

<sup>1</sup> Technically, the recipient of the service would be the electricity system operator.

### 3 Subsidy Control

#### Overview

- 3.1 Subsidy control is a reserved matter and the new subsidy control regime for the UK is not yet on the statute book and a subsidy control bill is currently in Parliament.
- 3.2 The subsidy control regime will need to comply with international obligations including WTO rules and international trade agreements. This includes the EU-UK trade and co-operation agreement which contains specific agreement on support for security of supply, renewable energy and emission reduction but will also likely mean that double subsidies (that is, two different subsidies subsidising the same activity) will not be permitted.
- 3.3 It is likely however that the subsidy control regime will support strategic interventions in priority areas – the consultation on subsidy control published this year specifically refers to achieving net zero.

#### The Subsidy Control Bill

- 3.4 The UK-EU Trade and Cooperation Agreement (TCA) adopted the central principles which underlie the EU State aid regime. Those principles will be implemented in the UK by the Subsidy Control Bill (the Bill) which is currently going through the House of Commons. In line with those principles, the Bill states that subsidies must pursue a specific policy objective, be proportionate and necessary, must stimulate change in behaviour of the beneficiary, and be the right means to achieve the objectives. The benefits of a subsidy must outweigh any negative impact on competition and investment in the UK and internationally.
- 3.5 The Bill adds a UK-specific principle that public authorities must design subsidies in a way that minimises any negative effect on competition and investment within the UK. This is a key UK Government concern: to protect domestic competition and investment against the distortive effects of regional, targeted subsidies.
- 3.6 Specifically, clause 18 of the Bill contains a prohibition on subsidies which are granted on condition that the recipient relocates all or part of its existing economic activities from one area of the UK to another. In its current form, the prohibition is potentially narrow in that it applies only where relocation is a condition of the subsidy rather than where relocation is a likely consequence. A Scottish subsidy which encourages investors to relocate investment to Scotland, with a promise of more generous financial support might not breach the prohibition in clause 18, but it could still breach the principle of avoiding negative impacts on the internal UK market.
- 3.7 Schedule 2 to the Bill contains nine additional principles which apply to subsidies related to energy and environment. Public authorities must ensure that:
  - Subsidies increase the level of environmental protection as compared to a base-line situation.
  - Subsidies do not relieve polluters from their liabilities.
  - Subsidies for “electricity generation adequacy, renewable energy or cogeneration” must generally be awarded in a fair and competitive process. Alternatively, a non-competitive process may be used under certain conditions; authorities have to avoid overcompensation and make sure that the subsidy does not distort trade and investment in the UK and between the UK and its trading partners.
  - Subsidies for electricity generation adequacy may be limited to installations not exceeding specified CO<sub>2</sub> emission limits.
  - Subsidies for renewable energy and cogeneration shall not affect beneficiaries’ participation in electricity markets.

- Subsidies in the form of partial exemptions from energy-related taxes and levies in favour of energy-intensive users shall not exceed the total amount of the tax or levy concerned.
- Subsidies that compensate energy-intensive users for increased electricity costs due to climate policy instruments, must be limited to sectors at significant risk of carbon leakage due to the increased costs.
- Subsidies for the decarbonisation of emissions linked to industrial activities in the UK shall achieve an overall reduction in greenhouse gas emissions and reduce the emissions from these activities.
- Subsidies for improvements of the energy efficiency of industrial activities in the UK shall improve energy efficiency by reducing energy consumption, either directly or per unit of production.

3.8 A public authority must consider the energy and environmental principles and ensure that, to the extent they may apply, the design of any renewable scheme is not inconsistent with them.

3.9 It is our view that a support scheme aimed at supporting marine renewables in Scotland could be designed in such a way as to comply with these principles.

### ***Subsidy Control and Devolution***

3.10 Subsidy control is (at least in part) a reserved matter meaning that only the Westminster parliament is entitled to legislate in that area. The United Kingdom Internal Market Act 2020 creates new reservations prohibiting the Scottish Parliament, Welsh Senedd and Northern Ireland Assembly from legislating in relation to both harmful subsidies and those which are potentially distortive.

3.11 Legislation that regulates the provision of subsidies is to be distinguished from legislation that confers a subsidy or sets up a subsidy scheme. The former is outside the scope of the powers of the Scottish Parliament altogether. The latter is not prohibited but the extent of the Scottish Parliament's powers to pass legislation conferring subsidies or creating subsidy schemes will be limited by the terms of the Subsidy Control Bill.

3.12 Devolved legislation providing for the payment of subsidies will be required to comply with the subsidy rules contained in the Bill. The enforcement measures contained in the Bill provide that a decision by the Scottish Government to give a subsidy, or to create a subsidy scheme, can be referred to the Competition Appeal Tribunal (the Tribunal) for review. Subsidies authorised by an Act of the Scottish Parliament may also be challenged. A review of devolved primary legislation, which created a subsidy scheme or conferred a standalone subsidy, would be heard before the Court of Session rather than the Tribunal.

3.13 A proposed Scottish subsidy scheme may also be referred to the Competition and Markets Authority (CMA) to assess compliance with subsidy rules. This would be required if either the Secretary of State directs the referral or if the proposed subsidy scheme qualifies as having "particular interest". The scope of the concept of particular interest has not yet been defined and will be the subject of future secondary legislation. The Bill also provides for a voluntary referral to the CMA by the public authority proposing to create the subsidy scheme requesting the CMA to produce a formal report, including a recommendation as to whether the scheme should proceed.

3.14 The combined effect of the reservation of subsidy control and the Subsidy Control Bill (if passed) will be that:

- 3.14.1 the Scottish Parliament may not make legislation that relates to the "*regulation* of the provision of subsidies which are or may be distortive or harmful by a public authority to persons supplying goods or services in the course of a business";

- 3.14.2 the Scottish Parliament may make legislation that confers a subsidy or creates a subsidy scheme, but that legislation must comply with the requirements of the Subsidy Control Bill and must not otherwise breach the limits of the Parliament's legislative competence (see section 2 on Powers); and
- 3.14.3 the Scottish Ministers may grant subsidies under existing or new powers to provide financial support but in doing so they must comply with the requirements of the Subsidy Control Bill and act within the limits of their devolved powers (see section 2 on Powers).

### **Option Specific Analysis**

#### **Option 1: Variable Revenue Support (VRS)**

- 3.15 *Subsidy Characteristics.* The VRS would be provided by the Scottish Government. The VRS would provide benefit to generators by transferring price risk from those companies to the Scottish Government. The Scottish Government would typically expect to make a loss over the duration of a VRS contract and therefore it is anticipated that there would be an overall net payment to generators.
- 3.16 *Controls.* The UK Government's CfD mechanism is a recognised state aid support for renewable energy under UK and EU law. Since 2014 the UK Government has structured its support for renewable energy through a CfD renewables scheme approved previously by the European Commission.
- 3.17 The principles on environmental subsidies which formed the basis for that approval are largely reflected in the TCA, which in turn are replicated in the principles set out in the Bill. A VRS scheme to support renewable energy which operates in a similar way to the UK CfD could therefore in principle be designed in a way that would comply with the rules.<sup>2</sup>
- 3.18 A renewable subsidy specific to Scotland would face a further test. As mentioned above, the new Bill contains an additional, UK-specific principle that public authorities must design subsidies in a way that minimises any negative effect on competition and investment within the UK. To avoid the risk of 'subsidy races' between different parts of the UK, the UK Government stated, in its response to its consultation, that it will encourage public authorities to undertake "an extensive and involved analysis" to assess the distortive effect of subsidies with most potential to harm the UK internal market.<sup>3</sup> Careful consideration will therefore need to be given to the design of any VRS scheme in Scotland taking into account the design of the UK CfD scheme and any scheme that the Welsh Government may introduce.
- 3.19 The UK Government intends to create "streamlined routes" for subsidies at low risk of distorting competition and that promote the UK Government's strategic objectives. It is possible that a streamlined route could be created for subsidies that support the transition to net zero. A streamlined route would create a pre-approved category of subsidies. Under this route, a new subsidy would not need to be the subject of a competition impact assessment but instead simply demonstrate that the subsidy meets the compliance criteria for the streamlined route. The Secretary of State would have a residual power to direct the CMA to report on any negative effects of the subsidy on competition or investment within the UK.

<sup>2</sup> The electricity markets in Scotland and Northern Ireland are linked through an interconnector which allows electricity to flow in either direction as determined by the relative prices in the two connected markets. To the extent that electricity generated by an installation supported by a Scottish subsidy scheme that could flow through this connection could affect trade in the Irish Single Electricity Market, it could attract scrutiny under EU state aid rules in line with the provisions of the NI Protocol to the EU Withdrawal Agreement. At this moment we consider this unlikely but it cannot be discounted.

<sup>3</sup> Government response to the consultation on subsidy control, June 2021.

## Option 2: Scottish DPA

- 3.20 *Subsidy Characteristics.* The DPA would be provided by the Scottish Government. The DPA would provide benefit to generators by providing a revenue stream simply for the plant being available to generate plus a top-up to market electricity prices when the plant generates power.
- 3.21 *Controls.* In line with traditional state aid rules, Schedule 2 of the Bill anticipates the need for state intervention to ensure adequate capacity in response to sudden swings in renewable production. The Bill provides that subsidies for electricity generation adequacy must generally be awarded in a fair and competitive process. A non-competitive process may be used if the public authority avoids overcompensation and makes sure that the "eligible capacity is unlikely to have a material effect" on competition or investment in the UK and between the UK and its trading partners. Subsidies for electricity generation adequacy may (but need not) be limited to installations not exceeding specified CO<sub>2</sub> emission limits.
- 3.22 The design of the support scheme would also need to comply with the general principles in Schedules 1 and 2 of the Bill which are set out above.

## Option 3: Scottish Government PPA

- 3.23 *Subsidy Characteristics.* The PPA would be provided by the Scottish Government. The PPA would provide benefit to generators by transferring price risk from those companies to the Scottish Government. The Scottish Government would typically expect to make a loss over the duration of the PPA and therefore it is anticipated that there would be an overall net benefit to generators.
- 3.24 *Controls.* A Scottish Government PPA would be assessed according to the same principles discussed earlier and set out in Schedules 1 and 2 of the Bill. Any distortive effect on the UK internal market and whether this was a proportionate response to the net zero objective would depend on the specific terms of the PPA.
- 3.25 A PPA which does not strike the appropriate balance between the environmental objectives and the principles in the Bill would be vulnerable to challenge. The key consideration is the extent to which the PPA would confer an economic advantage on the electricity generators. The public authority would need to ensure, if possible, that the agreed price under the PPA does not over-compensate the electricity generator. The term of the PPA may also need to be restricted to the length required to attract investment. Finally, the amount of electricity contracted under the PPA should be limited to the actual needs of the public authority to avoid incurring losses on resale of surplus quantities.

## 4 Allocating Support

- 4.1 If financial support can lawfully be granted to marine energy generators, the Scottish Government will need to consider the best method of allocating that financial support to recipients. In principle, there are two aspects to allocation – eligibility of participants and the method of allocating funds to those eligible for support.
- 4.2 Taking the method of allocation first, the UK Government has created several mechanisms for allocating financial support to new renewables development over the past two decades, from which a number of lessons are clear.
- 4.3 First among these, is that competitive allocation of CfDs drove down the amount of support required by generators quickly and efficiently. Early CfDs were allocated on a negotiated basis, at prices which now appear high relative to the prices achieved in competitive auction in just a few years: £140 per MWh vs £52.50<sup>4</sup> per MWh for offshore wind in just five years.
- 4.4 Second, that a contract for difference proved more efficient than the Renewables Obligation, which effectively provided a top up irrespective of the actual market price of the power sold by the generator. Apart from the lack of a claw back when market prices exceed the price required for the generator to make a return, it still required a floor price power purchase agreement (PPA), a more expensive product than the market access PPA required to support a CfD.
- 4.5 Third, the UK CfD auction uses a clearing price mechanism to set the level of the financial support provided. This mechanism was introduced partly for simplicity but also to address the failings of the very first support mechanism called the NFFO (or Non-Fossil Fuel Obligation) which allocated support at the level bid by each individual bidder. Bidding was competitive and many projects failed to be delivered as bidders bid unrealistically low prices.
- 4.6 Fourth, the UK CfD auction has used maximum caps on the levels of support available to ensure a competitive auction. Caps can be set for the overall financial support available, the support available to a single technology, or the support available to an individual project (which the UK Government used on the Renewable Heat Incentive scheme).
- 4.7 Fifth, the UK CfD auction allocates financial support based exclusively on price competition. This has proved effective in driving down bid prices, but ScotWind is an example of a bid process primarily based on the quality of submissions. It would not be possible to replicate the ScotWind process, which works only because it can set a fixed rental for windfarm sites. However, an auction in which the selection criteria include both price and qualitative aspects would be possible.
- 4.8 Summing up the evidence, a competitive auction allocating price support on an 'as cleared' basis with technology caps may represent a good way to allocate financial support. If the aim is to support projects of quality, rather than allocating solely on price, further consideration on allocation design would be needed.
- 4.9 The other aspect of allocation is eligibility, which can be set in a number of ways. First, holders of UK CfDs could be excluded. Second, minimum and maximum capacity limits could be set. Third, financial support could be targeted at specific technologies, such as marine technologies, by providing that only those technologies are eligible. Otherwise, many of the eligibility rules could be similar to those used in UK CfD auctions.

---

<sup>4</sup> In 2012 prices

## 5 Advantages and Disadvantages of the Options

### Option 1: Variable Revenue Support (VRS)

- 5.1 **Advantages.** VRS, which operates as a financial contract for difference, is a well understood instrument and has been shown to be effective in supporting investment decisions in new assets.
- 5.2 VRS is effective in supporting projects of all sizes that generate electricity on a continuous variable output basis, such as tidal stream plant.
- 5.3 The design of a VRS mechanism minimises the risk of overcompensation as the generator has an obligation to pay back when the power price is high.
- 5.4 **Disadvantages.** The UK Government operates a UK-wide CfD. Subsidy control measures are likely to limit a Scottish VRS mechanism to objectives that complement the UK CfD and do not operate in a manner that would compete with the UK CfD. This will limit the scope of any scheme.
- 5.5 The Scottish Government does not have the powers to enable electricity suppliers to recover the costs of a VRS mechanism from consumers and it would therefore need to be funded from the Scottish block grant or by Scottish taxpayers.

### Option 2: Scottish DPA

- 5.6 **Advantages.** The DPA model is still in development at UK level and there may be an opportunity to influence that development and create a specific support mechanism that complements the UK support.
- 5.7 By incentivising marine projects alongside storage, this type of support mechanism may provide more overall economic and system benefits than supporting marine projects alone.
- 5.8 **Disadvantages.** The model is untested at UK level and it is not yet clear the level of investment it may support.
- 5.9 The model has been developed primarily to support CCS power projects at a UK level, and therefore adaptability to renewables plus storage needs to be considered. The emerging UK DPA is very much designed from a fuelled project perspective, and therefore how a marine project is incentivised not to export when power supply exceeds demand will be a key design feature.
- 5.10 The Scottish Government does not have the powers to enable electricity suppliers to recover the costs of a Scottish DPA from consumers and it would therefore need to be funded by Scottish taxpayers.

### Option 3: Scottish Government PPA

- 5.11 **Advantages.** The Scottish Government could support new projects while buying green power and receiving a tangible service in return.
- 5.12 The mechanism to deliver this option, the corporate PPA, is well established in the renewables sector and suitable contracts could be developed and implemented based on existing precedents.
- 5.13 **Disadvantages.** The PPA would need to be 'sleeved' through a licensed electricity provider. This means that a three-party contract arrangement is required to which the generator, an electricity

supplier and the Scottish Government are party. This would come at an additional cost compared to the VRS option.

- 5.14 The capacity of this measure would be constrained to the power demand of the Scottish Government and public sector bodies.
- 5.15 The operation of public procurement rules adds an extra layer of constraint to the implementation of this option and in particular the need to demonstrate value for money.

## 6 Conclusions

- 6.1 Like many areas of devolved powers, the question as to whether the Scottish Government or Parliament has the powers required to implement a policy is not straightforward. In this paper, we have identified the powers upon which the Scottish Parliament and Scottish Government could rely in order to implement a Scottish financial support scheme for marine renewables. On balance, a VRS mechanism, or a variant based on a VRS mechanism may offer the best basis on which to proceed.
- 6.2 Any proposal to implement a VRS mechanism however faces two questions. First, the question as to whether there are devolved powers to implement such a scheme depends on whether, put shortly, the purpose of the scheme is to promote environmental protection or electricity generation. As a matter of fact, a VRS mechanism would do both, the question to determine is the purpose of the scheme as "purpose" is understood in the context of devolution law. The second question is whether the scheme could be designed in a way that is compatible with the upcoming requirement to ensure that a subsidy must not distort competition between different regions of the UK.
- 6.3 In assessing the first of these questions, a small (relative to UK CfD support) time-limited scheme that has a clear objective of facilitating the early deployment of technologies that can play a role in decarbonising Scotland's economy is more likely to be regarded as having the purpose of supporting environmental protection than electricity generation. We are also of the view that the size of the scheme will have a bearing on the question of whether it is likely to distort competition between the regions of the UK.
- 6.4 It is also our view that a support scheme aimed at supporting marine renewables in Scotland could potentially be designed in a way that complies with the emerging subsidy control regime, including the requirement that it must not have a negative impact on the internal UK market. However, the detail of any proposed scheme would need to be tested by economic analysis of the impact of that scheme.