

**Response to Draft Offshore Wind Policy Statement**

**Draft Response v2**

March 2020

Dear Sir/Madam,

Scottish Renewables is the voice of Scotland’s renewable energy industry, working to grow the sector and sustain its position at the forefront of the global clean energy industry. We represent around 260 organisations working across the full range of renewable energy technologies in Scotland and around the world, from large suppliers, operators and manufacturers to small developers, installers and community groups and companies right across the supply chain.

We welcome the Scottish Government’s support for offshore wind and the publication of a draft policy statement. Our members believe that this is an important opportunity to set out the Governments aspirations for the sector, alongside the draft Sectoral Marine Plan which is the process through which new sites for development will be identified.

The key points that we wish to highlight are as follows:

* Our members welcome the policy statement which is an opportunity to clearly articulate the Scottish Government’s ambitions for the sector to 2030 and 2045.
* We recommend an ambition of 12 GW of offshore wind in Scotland by 2030 and 30 – 35 GW by 2045, to enable Scotland to meet Net Zero and 2030 emission reduction targets with a resource appropriate share of UK offshore wind.
* The Sectoral Marine Plan should be aligned with these ambitions by retaining all shallow water sites, the removal of DPO NE6 from the list of high ornithological constraint, addressing other ornithological constraints as a priority and exploring potential derogations.

We look forward to working with the Scottish Government as its plans for offshore wind and the wider response to the Climate Emergency are developed.

Kind regards,

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**RESPONSE TO CONSULTATION QUESTIONS**

# Does the current pipeline and level of activity in the offshore wind sector in Scotland provide a sufficient platform upon which to build the greater contribution required to achieve our climate change goals?

Our members do not believe that the current pipeline of projects will be enough to achieve Scotland’s climate change goals. Scotland currently has a pipeline of 7.5 GW of potential offshore wind capacity (with 3.5 GW confirmed for construction). Meeting the Scottish and UK Government targets to reach net-zero emissions will require a substantial increase in renewable power generation, with the Committee on Climate Change recommending that at least 75 GW of offshore wind capacity will be needed across the UK by 2050[[1]](#footnote-1).

Targeting a 40 to 45% share of this in Scotland[[2]](#footnote-2) would make the most of its excellent wind resources and bring substantial economic benefit. This would require **deployment of 30 – 35 GW by 2050**, requiring additional pipeline beyond the current set of consented projects, which the Sectoral Marine Plan (SMP) can provide. The plan contains sufficient resource in theory to meet this level of ambition, although our members note that the deployment cap in the SMP (10 GW) would be insufficient to reach that goal[[3]](#footnote-3).

# Do you believe that the 2030 visions and aspirations described above are sufficiently ambitious?

Our members welcome the intention to drive greater offshore wind deployment through the Sector Deal and support the UK Government intention to increase deployment by 2030 from 30 GW to 40 GW. This will unlock additional economic benefit as well as moving the UK towards the net zero emissions pathway.

Our members also welcome the formation of the Scottish Offshore Wind Energy Council (SOWEC) and believe that it will provide a valuable means by which to coordinate and accelerate measures to grow the industry in Scotland. We welcomed the 2030 vision but note significant changes in context since it was developed that it would be helpful to reflect by increasing ambition significantly: the increased UK Government ambition noted above and the passing of Scotland and the UK’s net-zero emissions targets. Scotland’s new climate change targets require a 75% cut in emissions by 2030, an increase on the previous target that will require a faster pace of emissions reduction by this date. This will likely lead to increased demand for electricity in the transport and heat sectors which will require additional renewable generation.

Revising the 8 GW by 2030 ambition would also enable better alignment with ScotWind leasing. New options for leases will be awarded for ten years which will require those awarded in 2020 to deliver operational projects by 2030; the current 8 GW ambition could largely be achieved by delivering the existing 7.5 GW of project pipeline. Our members recommend an **ambition to deliver 12 GW in Scotland by 2030.** This wouldput Scotland on a path to delivering up to 35 GW by 2045 and ensure ambitious deployment of floating offshore wind this decade to secure early mover advantage.

Our members also believe that it would be helpful for SOWEC or the Scottish Government to set delivery ambitions out to 2045, mirroring the Sector Deal. Given the long lead in time for projects, and the clear low-carbon energy requirements of net-zero targets, such a target would provide clarity around which other policies (e.g. the SMP, skills etc.) can be aligned.

# What actions do you believe should be taken by the Scottish Government, UK Government and agencies in order to realise the full potential of Scotland’s offshore wind sector?

The Scottish Government has a key role to play to realise the full potential of Scotland’s offshore wind sector. Our members have identified the following priority areas where action is required:

* Work to alleviate the constraints that limit development at some DPOs within the Sectoral Marine Plan
* Improve the planning process
* Ensure that regulatory burdens do not penalise the economics of Scottish projects in the UK market
* Foster better coexistence between all users of the sea

**Alleviate SMP constraints**

Our members welcome the development by Marine Scotland of a new Sectoral Marine Plan (SMP) for offshore wind, which will determine the location for potential new projects and the long-term future of the industry in Scotland. This process has highlighted uncertainty over cumulative ornithological impacts as a potential barrier to further development, with development at eight of the seventeen potential zones (Draft Plan Options, DPOs) subject to high ornithological constraint, significant additional research or survey work. The constrained DPOs provide some of the most suitable sites for projects - two provide shallower water suitable for fixed bottom foundations[[4]](#footnote-4), which are expected to continue to be the norm for near-term UK offshore wind deployment, and all are on the East coast which and have greater access to onshore electricity transmission capacity. Addressing the constraints at these sites will therefore be a vital step to providing sufficient pipeline for deployment in Scotland. The proposal for an Iterative Plan Review (IPR) of the SMP is welcome (subject to uncertainties regarding governance and process being resolved) as this will provide the opportunity to coordinate the necessary research and survey work. Our members also urge the Scottish Government to explore the potential for derogations under Article 6 (4) of the Habitat Regulations as a route to enabling more potential projects to come forward.

**Improve the planning process**

Linked to the above, a significant difference between development of offshore wind projects in Scotland and the rest of the UK is the Scottish Government approach to planning. Whilst our members recognise the robust spatial approach taken with the draft SMP, it is felt that the identification of new sites has taken a risk averse approach, with potential areas selected before industry consultation. Similarly, the reasons for the removal of some initial Areas of Search from the final list of proposed DPOs has not been clearly articulated within the SMP documents. This contrasts with the approach taken in England and Wales where industry works collaboratively with consenting bodies to identify potential areas at the outset. It is also felt that Scotland has taken a more precautionary approach to potential ornithological risks, with assessments informed by SNCB advice rather than the legal baseline position that no AEOI has been concluded for the three relevant projects consented to date.

**Regulatory costs**

Another important way that the Scottish Government can support the offshore wind sector is to ensure that the costs of its policies and regulations do not place Scottish projects at a competitive disadvantage within the UK offshore wind market. Projects compete for Contracts for Difference on cost, and with Scottish projects already disadvantaged through higher transmission charges relative to projects located in the south of the UK, any extra costs could place Scottish projects at a relative disadvantage. Scotland-specific policies are currently in development – with proposals for Supply Chain Management Statements to be implemented through ScotWind leases, a Marine Conservation Fund and new decommissioning proposals. To ensure the future competitiveness of Scottish projects it will be important to ensure that Scottish Government regulatory requirements are aligned as far as possible with those elsewhere in the UK, and where additional requirements are implemented, that the costs of these are proportionate.

**Interactions with other marine users/stakeholders**

The Scottish Government already plays an important role in managing access to Scotland’s seas between different industries and stakeholders. Achieving a significant deployment of offshore wind in Scottish waters will require the careful management of competing interests. Our members already report some difficulties in establishing and implementing new ways of working with other sea users, in particular the fishing industry, and would welcome resolution of key issues such as the removal of abandoned/nuisance fishing gear and how compensation for fishing disruption should be agreed. Our members welcome the significant cross-sector consultation that has informed development of the SMP and hope that the significant input to that process from the fishing sector will lay the foundations for co-existence with projects that may result from that plan.

**UK Government**

Our members consider that the key means by which the UK Government can support Scotland’s offshore wind sector is by revising the Contracts for Difference scheme, to hold yearly auctions and provide a separate allocation pot for floating offshore wind projects. Yearly auctions would enable better delivery of the 40 GW by 2030 ambition by providing a more consistent pipeline of projects to the supply chain. Floating offshore wind projects cannot compete on price against fixed bottom projects in Contracts for Difference auctions.

# What are the key regulatory and cost challenges facing the offshore wind sector?

# What more can the sector and other key stakeholders do to tackle these?

The offshore wind industry is looking to more than quadruple the UK’s current installed capacity by 2030 to meet the UK’s requirements for low-carbon electricity and help meet climate targets. This will require that the relevant regulatory regimes are fit to deliver at scale and at the lowest cost. The Sector Deal provides a framework within which to do so, but our members highlight the following regulatory and cost challenges specific to Scotland.

**Transmission network charging**

A key challenge facing offshore wind in Scotland is electricity transmission network charging, and our members welcome acknowledgement of this in the draft policy statement. These costs are regulated by Ofgem and are higher for projects situated furthest from centres of demand. Ofgem is currently working on reforms[[5]](#footnote-5) that would further increase the fees paid by projects in the north of GB. These costs are a significant burden for Scottish projects competing in Contracts for Difference auctions. For example, charges could increase the CfD auction bid of a 1 GW project in Scotland by £5/MWh[[6]](#footnote-6) which represents 12.5% of the value of the winning bids in the third CfD auction round.

We have expressed our concerns to Ofgem[[7]](#footnote-7) and have commissioned research in collaboration with RenewableUK that will illustrate the scale of the potential charging increases on Scottish projects. We would welcome the opportunity to share these outputs with the Scottish Government.

**Interactions with other marine users/stakeholders**

As noted in answer 3 above, interactions between the offshore wind and fisheries industries present a source of risk and cost. Although our members strive to engage local fishing communities and welcome the constructive attitude of this sector, there have been instances where fishing gear has interrupted surveying and construction operations at pre-agreed sites. Such delays can cause costs into the hundreds of thousands of pounds, as survey vessels are costly to hire and done so on a time limited basis by individual projects.

Industry has created a fisheries sub-group within SOWEC which will aim to share learning, best practise and find solutions to common problems faced by projects as they enter construction and operation, to complement initiatives by Marine Scotland to foster collaboration between both sectors. It would also be helpful if the National Marine plan were fully aligned with the net zero target and ambitions within the Sectoral Marine Plan for offshore wind and policy statement.

**Potential regulatory costs and timescales in Scotland**

As noted above, offshore wind projects compete on price to secure Contracts for Difference, and the cost of regulatory requirements should be assessed, particularly where these may have a variable impact on projects (e.g. penalising some more than others). The Scottish Government is proposing to implement supply chain statements (through ScotWind leases) and a voluntary Marine Conservation Fund, which will impose additional costs on Scottish projects. Whilst our members support the aims of these two initiatives, they must be developed with awareness of the potential impact on cost competitiveness. Similarly, the Scottish Government has previously published guidance relating to Community Benefits from renewable projects[[8]](#footnote-8). The guidance for offshore renewables is being updated at present and our members therefore recommend removal of reference to these in the policy statement until these changes have been finalised and agreed with industry.

# What should the key Scottish priorities be in relation to Air Defence Radar, and towards radar mitigation more generally?

Although significant progress has been made in addressing wind/aviation issues, a piecemeal approach with a lack of an overall national (UK wide) strategy has been a constraining factor. The Scottish Government approach is welcomed and seen as a positive step forward.

However, an overall strategy is needed which creates a holistic approach across government departments. With senior ministerial support this would enable all sectors to be cooperative and cohesive in delivering the net zero aspirations as it would set a common framework within which all have to work. Whilst the focus of this policy statement if offshore, it is important that the context recognises that in relation to aviation, the way forward has to be managed to deliver a successful outcome for both.

Following the Sector Deal, a positive initiative has been established between MoD (RAF) and the Offshore Wind Industry Council to develop a strategic approach to finding an enduring Air Defence mitigation. This work is a significant potential contribution to delivering the Scottish offshore policy and should, if successful, have consequential benefit for onshore developments. The scope of the work also includes military ATC. The Scottish Government would clearly benefit from remaining closely engaged and supporting this initiative.

In respect of civil aviation issues, there is a need to seek a national strategic approach which capitalises on the opportunities which will arise from airspace architecture reviews and advances in civil air traffic management (ATM) technologies. The approach needs to move from one of developers and aviation stakeholders negotiating bespoke, and consequently costly, solutions on a case by case basis to one where the overall environment recognises the need for co-existence between wind and aviation. If this was led by DfT as their contribution to a cross government coordinated approach, it would provide the necessary policy and strategy framework for CAA and the aviation stakeholders to optimise the future solutions by a requirement to include wind in their objectives.

This would help direct the approach taken by aviation authorities so that the scope of benefits that can be delivered as aviation develops and deploys new concepts and systems have added value in contributing to net zero. This would not necessarily require significant additional investment as the changes are already being planned within aviation.

The Scottish Government initiative in forming the Aviation 2030 Taskforce is seen as a valuable contribution to identifying the issues and developing a cooperative approach to seek an enduring approach. This will also provide a platform to coordinate inputs necessary to support engagement with Westminster.

# What more can the Scottish Government do, working with industry and other stakeholders, to address ‘knowledge gaps’ in environmental assessments for potential offshore wind developments?

Our members wold like to highlight that collective knowledge of bird ecology and impacts has increased rapidly over the last 10 years and our understanding of impacts will no doubt increase over the next 10 years. However, there will always be knowledge gaps and new questions to answer. Whilst ongoing research is important uncertainty/knowledge gaps should not be a reason to stifle development decisions.

Our members welcome the commitment within the Draft SMP for the final SMP to be subject to regular review and management following adoption, supported by an Advisory Group and support the intention to review the plan on a two-yearly basis. We believe this to be the best vehicle through which to address current environmental constraints.

An important element of iterative plan review will be a process for identifying when the evidence base will become sufficient to allow HRA of future plans to conclude no likely AEOI from the DPOs currently subject to high ornithological constraint and enable developments within these DPOs to be consented. A timetabled evidence-gathering exercise, including monitoring data from consented windfarms and additional research projects, should set out how and when this evidence will be available to a satisfactory level, identifying further research gaps and how these will be addressed. We also encourage the Scottish Government to look into opportunities to collaborate outside of Scotland given a number of UK wide initiatives that could provide valuable input to Scottish assessments.

Although we support the IPR process, there are a number of issues still to be resolved. To have a rolling programme of the IPR has the potential to have an ongoing influence at project level, which is potentially concerning for developers progressing projects in the DPOs not currently considered high risk. Clarity is needed from Marine Scotland that individual projects will be autonomous in their decision making, that full access to Article 6(3) and Article 6(4) remains at project level where relevant in each case and that if an individual developer makes a case for a project it should be considered on its own merits.

# What steps can be taken to improve interactions between offshore wind and other marine sectors?

Offshore wind will increasingly interact with other marine sectors and stakeholders as deployment in Scottish waters trebles over the next five years with the construction of the Neart Na Goithe, Moray East and SeaGreen projects. The fishing industry is perhaps the most crucial stakeholder, in terms of breadth of interaction and potential to impact on construction and operation of offshore wind projects, and our members would welcome additional alignment of marine polices with the Scottish Government’s ambitions for increased deployment of offshore wind.

# How could a competitive market framework that promotes the development of floating wind be developed whilst still retaining value for money for the consumer?

[To be updated in light of the new CfD consultation]

# Considering the currently available literature and analysis, what do you consider a successful offshore wind industry in Scotland in the future would look like?

# What scale of deployment would you estimate or believe to represent a successful outcome, and why?

# What actions should industry and government take to address the issues described in this section and ensure the most positive future position for offshore wind in Scotland?

Our members believe that a successful offshore wind industry in Scotland by 2050 will be one that delivers substantial renewable generation to both Scotland and the rest of the UK, is deployed in an environmentally sensitive way that delivers substantial local and national economic benefit as part of a net-zero emissions economy.

Clear articulation o the Scottish Government’s ambitions for offshore wind deployment to 2030 and 2045 would help ensure alignment of policies across Government and help ensure the maximum benefit accrues to Scotland of growing this globally significant low-carbon industry. Targeting a 40 to 45% share of the UK’s likely offshore wind deployment by 2045/50 would make the most of Scotland’s excellent wind resources and bring substantial economic benefit. This would require **deployment of 30 – 35 GW by 2050,** meeting Scotland’s domestic requirements[[9]](#footnote-9) and exporting a large surplus to neighbouring countries.

The next decade will be a crucial one for offshore wind in Scotland as the industry catches up with the rest of the UK, and the commercialisation of floating offshore wind opens up new opportunities in our deeper waters. Our members therefore recommend an ambitious deployment target of **12 GW in Scotland by 2030.**

**SUPPLY CHAIN**

# What areas of the Scottish supply chain do we excel at, and what could we do better?

Offshore wind in Scotland is still an emerging industry, with activity increasing significantly in the last few years after a slow start due to more challenging water depths and sea conditions relative to other parts of the UK - Scotland currently has 10% of the UK’s operational offshore wind capacity[[10]](#footnote-10). This will increase over the coming years with a further 2.5 GW of capacity under construction[[11]](#footnote-11) providing conditions to bolster the emerging Scottish supply chain. The sector currently employs 3,400 people in Scotland[[12]](#footnote-12) and this is expected to grow as deployment increases.

Scotland has particular current strengths in project development, with a number of established developers[[13]](#footnote-13) and wide range of companies providing dedicated legal, financial and consulting services[[14]](#footnote-14).

Offshore wind farms are operated and maintained locally and ports along the east coast are benefitting from dedicated servicing facilities each bringing around 100 long term jobs[[15]](#footnote-15). Local ports are also benefitting from construction phase activity, with Dundee and Nigg expanding their capabilities as a result of recent contracts.

There are some areas in which the Scottish and UK supply chain is weaker, particularly in terms of construction and installation. Recent analysis conducted for the Offshore Wind Growth Partnership by the Offshore Renewable Energy Catapult[[16]](#footnote-16) into the current UK capabilities for turbine foundations found that:

* **Monopiles:** expected demand Europe-wide and the characteristics of manufacture suggest that a manufacturing facility could be established in the UK.
* **Jackets:** there has been a clear trend of jacket fabrication contracts going abroad despite the presence of UK and Scottish companies (BiFab), driven primarily by cost reduction, with UK-fabricated transition pieces and jackets 10-15% more expensive than the most competitive prices achievable in the market. There have been instances where orders have not been fulfilled which has then impacted on perceived risks and financing, which will need to be resolved through additional investment and work to improve confidence and reputation.
* **Ports:** the best in class fabrication facilities (Esbjerg in Denmark, Rotterdam in the Netherlands or Rostock in Germany) for monopiles and jackets are sited at large ports, with excellent logistics, including efficient goods in and goods out routes and processes for movement of thousands of tonnes of raw materials and finished goods. This is critical to maintaining the most competitive pricing and the UK currently has no equivalent to the best European facilities, with additional investment required to do so.

The Growth Partnership will be publishing further studies examining UK capabilities across the offshore wind supply chain.

# Where are the new areas that Scotland can develop and exploit a competitive supply chain advantage?

Scotland forms part of a UK wide supply chain but has potentially unique offerings from the oil and gas industry with expertise relevant in high-end technical services, UAV, data and communications and moorings.

# What are the main challenges a company faces when tendering for a contract?

# Subject to procurement law, what more should government and its agencies do to assist the supply chain to secure contracts?

Government can assist the supply chain to secure contracts in the following ways: support the activity of the Offshore Wind Growth Partnership, incentivise supply chain to participate in industry reviews of supply chain capability to improve understanding of strengths and weaknesses and with the support of DTI review global competitors to benchmark success and expectations to understand what they are competing against.

# What are the key skills issues and gaps facing the sector over the coming years, in the short and medium term?

There are current skills gaps in the availability of workforce for operations and maintenance activities. The near-term focus should be on encouraging greater numbers of engineers into the wider construction sector as well as the offshore wind sector and engaging and encouraging transition from oil and gas sector as activity there begins to wind down with continued depletion of North Sea fields. The Investment in Talent (OWIC) and Skills Group (SOWEC) will be critical to building our understanding in this area. Support of national and international Passporting programmes for enabling transfer between associated industries will also help ensure a smooth transition.

Significant progress has been made, especially in Scotland on having integrated information and approaches.  In order for the long-term roles to be available for local residents more flexibility in funding mechanisms should be available – so people can be employed in one location, trained and gain experience outside of that location to ensure operational readiness and then re-deployed locally. Additional work should be done to ‘debias’ education by the government and the sector needs to ensure a diverse representation of role – to ensure the people with the skills entering the sector are diverse and representative.

In the longer term, clearly Scotland’s offshore wind future will depend on the commercialisation and deployment of floating wind farms, given the larger volume of deep-water sites in the current draft SMP. Technological uncertainty regarding foundation design makes it hard to determine exactly what the future skills requirements will be for that industry, but deep-water capability and ports and harbour/ logistics infrastructure that can cope with the large size of structures will be key priorities.

**INNOVATION**

# What more should government and the sector do to build on the progress made in recent years?

Priority areas for innovation and cost reductions for the sector are:

* Automation of inspection and repairs
* Minimising material (steel & grout) on fixed bottom structures
* Supporting and encouraging synergies with O&G in particular with regards:
  + Transfer of skills from individuals and re-training O&G personnel for the offshore wind sector
  + Re-focus suppliers for the offshore wind sector, merging of best practice standards for operations, inspections, health and safety

# What can Scotland learn from the approach taken in other countries around the world in this area? Are there examples of best practice you can share?

*Member input required.*

# What can the Scottish Government most usefully and feasibly do to build on the innovation support previously and currently available?

*Member input required.*

# How can we support technologies and developments which reach a viable stage between leasing rounds and CfD auctions?

Having flexibility over lease milestones and baseline validity in EIA would help the stranding of assets that do not gain a Contract for Difference or apply for leases between leasing rounds.

*Member input required.*

# Where respondents believe that scope remains for innovation in fixed offshore wind, what areas should be prioritised?

*Member input required.*

# What actions should be taken to address the key challenges facing the uptake of commercial scale floating in Scotland?

**As noted above,**

*Member input required.*

# What can be done, on the part of government and / or others, to strengthen and benefit from the synergies with a) hydrogen and b) the oil and gas sector?

*Member input required.*

1. Committee on Climate Change, 2019, Net Zero Technical Report [↑](#footnote-ref-1)
2. Scotland will have a c.20% of the UK’s installed offshore wind fleet by the time all projects currently under construction come online [↑](#footnote-ref-2)
3. Total deployment in Scotland of 17.5 GW could be achieved with the SMP as currently proposed: 7.5 GW of currently consented projects and 10 GW through ScotWind [↑](#footnote-ref-3)
4. These DPOs account for approximately 25% of the shallow water area (< 60m) contained within the SMP [↑](#footnote-ref-4)
5. *Targeted Charging* and *Access and Forward Looking Charges* Reviews [↑](#footnote-ref-5)
6. Assuming TNUos of £25/kW and a load factor of 0.5 [↑](#footnote-ref-6)
7. <https://www.scottishrenewables.com/publications/562-letter-to-jonathan-brearley-ceo-ofgem> [↑](#footnote-ref-7)
8. Good Practice Principles (GPPs) for Community Benefits from Onshore Renewable Energy Developments (2014) and Community Benefits from Offshore Renewable Energy developments (2015) [↑](#footnote-ref-8)
9. Meeting the Scottish Government’s 2050 ‘electrification’ scenario in the 2017 Energy Strategy would require c.22 GW of offshore wind (if this was the sole source of generation) to meet the ambition of generating 140% of Scotland’s electricity needs. This scenario was modelled to meet the previous target of an 80% cut in emissions and requirements will be higher for net-zero emissions targets. [↑](#footnote-ref-9)
10. 1 GW of a total 8.5 GW operational capacity as of 20.02.20 [↑](#footnote-ref-10)
11. Naithe ne Goithe, Moray East, Kincardine and Sea Green 1 [↑](#footnote-ref-11)
12. ONS, Low carbon and renewable energy economy indirect estimates [↑](#footnote-ref-12)
13. EDF Renewables, EDP Renewables, Red Rock Power, ScottishPower, SSE all have their HQs in Scotland. [↑](#footnote-ref-13)
14. <https://www.scottishrenewables.com/publications/532-scotland-s-offshore-wind-sector-supply-chain-impact-2018-19> [↑](#footnote-ref-14)
15. For example Wick (Beatrice), Fraserburgh (Moray East), Eyemouth (Neart na Goithe) [↑](#footnote-ref-15)
16. Offshore Wind Growth Partnership, 2019, UK Strategic Capability Assessment Offshore Wind Foundations [↑](#footnote-ref-16)