



Northern Ireland
Assembly

Committee for the Economy

Report on the Small-Scale Green Energy Bill

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Powers and Membership

Powers

The Committee for the Economy is a Statutory Departmental Committee established in accordance with paragraphs 8 and 9 of Strand One, of the Belfast Agreement, and under Assembly Standing Order No 48. The Committee has a scrutiny, policy development and consultation role with respect to the Department for the Economy, and has a role in the initiation of legislation. The Committee has nine members, including a Chairperson and Deputy Chairperson, and a quorum of five.

The Committee has power to:

- consider and advise on Departmental budgets and Annual Plans in the context of the overall budget allocation;
- approve relevant secondary legislation and take the Committee Stage of relevant primary legislation;
- call for persons and papers;
- initiate inquiries and make reports; and
- consider and advise on matters brought to the Committee by the Minister for the Economy.

Membership

The Committee has 9 members, including a Chairperson and Deputy Chairperson, and a quorum of five members. The membership of the Committee is as follows:

- Dr Caoímhe Archibald MLA (Chairperson)
- Mr Matthew O'Toole (Deputy Chairperson)

- Mr Keith Buchanan MLA
- Mr Stewart Dickson MLA
- Mr Stephen Dunne MLA
- Mr Michael Nesbitt MLA
- Mr John O'Dowd MLA
- Ms Claire Sugden MLA
- Mr Peter Weir MLA

1 With effect from 10 February 2020 Mr John Stewart replaced Mr Alan Chambers

2 With effect from 8 February 2021 Mr Paul Givan replaced Mr Gary Middleton

3 With effect from 19 March 2021 Mr Gary Middleton replaced Mr Paul Givan

4 With effect from 12 April 2021 Mr Mervyn Storey replaced Mr Gordon Dunne

5 With effect from 1 June 2021 Mr Mike Nesbitt replaced Mr John Stewart

6 With effect from 21 June 2021 Mr Peter Weir replaced Mr Christopher Stalford

7 With effect from 21 June 2021 Mr Keith Buchanan replaced Mr Mervyn Storey

8 With effect from 5th July 2021 Mr Stephen Dunne replaced Mr Gary Middleton

9 With effect from 18th October 2021 Mr Matthew O'Toole replaced Ms Sinead McLaughlin

List of Abbreviations and Acronyms used in this Report

Abbreviation/Acronym	Full explanation of Abbreviation/Acronym
CCC	Climate Change Committee
EAI	Electricity Association of Ireland
NIRO	Northern Ireland Renewables Obligation
RaISe	Assembly Research and Information Service
RNI	Renewables Northern Ireland
UFU	Ulster Farmer's Union

Executive Summary

1. This report sets out the Committee for the Economy's consideration of the Small-Scale Green Energy Bill. This Bill is a Private Member's Bill sponsored by John O'Dowd MLA. The Bill contains eight clauses and has the following policy aims:
 - To place a requirement on major electricity providers and suppliers to provide an obligatory minimum price tariff for exporting micro-generated renewable power into the grid.
 - For the Minister for the Economy ("the Minister") to establish a small - scale green energy micro-generation scheme with powers that include setting this minimum price tariff, and to alter it depending on relevant economic conditions (e.g. broader macroeconomic conditions, the unit price of renewable energy and the financial stability of the providers themselves etc.).
 - To provide the Minister with the power to determine what providers are eligible for the scheme by setting a minimum threshold for market share.
2. The context and timing of this Bill are significant given that it was introduced prior to the publication of the Energy Strategy 2050 by the Department for the Economy (the Department). The Bill Sponsor indicated that it was his intention to bring forward this legislation to require the Minister to establish a scheme to incentivise the growth of micro-generation. In the view of the Bill Sponsor, legislative intervention at this stage is necessary in order to revive the community energy sector.
3. The Department opened a consultation on the Energy Strategy in March 2020 and consulted on a subsequent options paper in March 2021. The Department made clear during its consultation that it would not be in a position to legislate on energy policy within the current Assembly mandate and that it anticipated a package of legislation around the Energy Strategy in the next mandate.

4. The Committee Stage of the Bill ran from July 2021 until January 2022 with the Energy Strategy receiving Executive endorsement and being published in December 2020, albeit without an accompanying Action Plan.
5. The Committee for the Economy has been involved in the detailed scrutiny of the Department's consultation on the Energy Strategy and its options paper; and completed its own Micro Inquiry Special Report on the key components of the Energy Strategy in November 2020.
6. The Committee has always been clear in its view that it considered the Energy Strategy as part of a suite of strategies and policies that fit together to deliver overarching strategies, such as the Economic Recovery Action Plan and the 'New Decade, New Approach' Agreement. Additionally, the Strategy will need to dovetail with other key strategies, such as those for skills, tourism and sectoral reviews of FE and HE. It is in this context that the Committee considered this Bill and the views of its stakeholders in relation to its provisions.
7. The Committee requested evidence on the Small-Scale Green Energy Bill from a range of stakeholders to which it received 12 written submissions and carried out a detailed online survey to which it received 45 responses.
8. The Committee held a number of oral evidence sessions with stakeholders, including the Utility Regulator, NIE Networks, Renewable NI, SSE Airtricity, Dr Patrick Keatley (Ulster University) and Power NI. The Committee also received a briefing from the Assembly's Research and Information Service (RaISe).
9. The Committee sought advice from the Examiner of Statutory Rules in relation to the range of powers within the Bill to make subordinate legislation. The Examiner considered the Bill and Explanatory and Financial Memorandum and a copy of the report can be found at **Appendix 7**.
10. The Committee heard oral evidence from the Bill Sponsor and explored the wide range of issues raised in the written and oral evidence. The Committee considered and deliberated on the provisions of the Bill and the proposed amendments at 11 meetings, concluding with its formal clause by clause consideration on 19th January 2022.

11. The majority of stakeholders were supportive of the principles of the Bill in terms of supporting micro-generation but believe that this Bill is not the right mechanism and may be premature given the anticipated publication of the Energy Strategy. Many stakeholders who responded to the Committee consultation were closely consulted on the development of the Energy Strategy by the Department over several years.
12. Stakeholders pointed to the development of the Energy Strategy by the Department and indicated that targets for micro-generation should sit as part of an overall strategy and should focus on providing the greatest carbon savings at the best value to consumers. Many stakeholders also suggest that the focus of micro-generation should be self-consumption rather than export as is the focus of this Bill.
13. There were also concerns outlined that, whilst well-intentioned, the Bill may result in a benefit to those who can afford to install micro renewables whilst raising network costs for other more vulnerable consumers. Stakeholders highlighted that increasing micro-generation would require significant additional grid investment decisions to be taken with the risk that the cost would ultimately be passed on to business and domestic consumers
14. The Department, as well as a number of stakeholders, highlight that regulated export tariffs are already on offer. It is stated in a number of written submissions that Power NI already provides a micro-generation export tariff that is annually approved by the Utility Regulator and therefore offers current micro-generators a route to market. Other suppliers are also free to offer export tariffs for micro-generation. Stakeholders also referred to the trend in other jurisdictions, for example, Britain and Ireland towards remuneration for export on a market-value approach.
15. Given the concerns raised by the Department and stakeholders, the Committee considered a number of options in terms of how to proceed with the Bill. Given that the Energy Strategy was published in December 2021 towards the end of the Committee Stage of this Bill; the Committee was not in a position to reconsider the Bill in the context of the Strategy within the timeframe nor could it do so in any meaningful way in the absence of an Action Plan.

16. The Committee therefore concluded that it would reserve its position on the clauses of the Bill and present the evidence it received as part of this Committee Report for consideration by the Assembly should the Bill proceed to Consideration Stage.

Introduction

Background to the Bill

17. The Small-Scale Green Energy Bill was introduced to the NI Assembly by John O'Dowd MLA on 6 July 2021 and was referred to the Committee for the Economy for consideration in accordance with Standing Order 33 (1) on completion of the Second Stage of the Bill on 28 September 2021.
18. At introduction, John O'Dowd MLA made the following statement under Section 9 of the Northern Ireland Act 1998: 'In my view the Small-Scale Green Energy Bill would be within the legislative competence of the NI Assembly'.
19. The Bill as introduced requires the Minister for the Economy to establish a small scale green energy micro-generation scheme with powers that include setting a minimum price tariff, and to alter it depending on relevant economic conditions (e.g. broader macroeconomic conditions, the unit price of renewable energy and the financial stability of the providers themselves etc.).
20. The context in which the Committee considered the provisions of this Bill are particularly relevant given that it pre-empted the development of the Energy Strategy 2050 by the Department. As outlined above, the Committee Stage of the Bill commenced in September 2021 with the Energy Strategy receiving Executive endorsement and publication by the Department in December 2021 but without an accompanying Action Plan.
21. The Department had already indicated to the Committee that it would not be in a position to bring forward any legislation to support the Energy Strategy in the current mandate. However, it is expected that this will be forthcoming in the next mandate.
22. During the Second Stage debate John O'Dowd MLA acknowledged the Development of the Energy Strategy up to 2050 by the Department and the 2019 report on decarbonisation from the Climate Change Committee, 'Reducing emissions in Northern Ireland', which explicitly recommended a supplier obligation and feed-in system.

23. The Member indicated that, in his view, legislative intervention is necessary to grow rapidly the share of renewables on the grid. He outlined that one way of doing that is to expand the share of micro-generated renewable energy adding that *“the energy market has evidently failed to provide sufficient price incentives for homes, businesses and farms to switch to microgeneration systems. The removal of the Northern Ireland renewables obligation (NIRO) and other renewables obligations have produced a stagnant community energy sector. The Bill is intended to be the first step in reversing that trend. It will incentivise the growth of micro renewable energy generation in homes, farms and businesses by creating a minimum tariff that major suppliers must pay for power generated from such sources”*.

Committee Approach

24. The Committee carried out a four-week consultation on the Small-Scale Green Energy Bill from 22nd October to 18th November 2021. The Committee published a media sign posting notice in the Belfast Telegraph, Irish News and Newsletter seeking responses to its Bill survey. The Committee received 45 responses to its survey along with 12 separate written submissions. The Committee would like to place on record its thanks to all who responded. Copies of the written submissions are included at **Appendix 5**. A copy of the survey summary report is provided at **Appendix 7**.
25. The Committee also agreed a social media strategy to raise awareness of and engage with the public via social media to encourage participation in the Committee Stage of the Bill. Four social media platforms (NI Assembly Blog, Facebook, Twitter and Instagram) were used to disseminate information on the Bill.
26. During the period covered by this report the Committee considered the Bill and related issues at 14 meetings. The Minutes of Proceedings are included at **Appendix 3**.
27. The Committee had before it the Small-Scale Green Energy Bill (NIA 33/17-22) and the Explanatory and Financial Memorandum that accompanied the Bill.

28. At its meeting on 6 October 2021, the Committee agreed a motion to extend the Committee Stage of the Bill to 28 January 2022. The extension requested by the Committee reflected need to progress the legislation in a timely manner but also to ensure robust and detailed scrutiny by the Committee. The motion to extend was supported by the Assembly.
29. The Committee received an introductory briefing on the principles of the Bill from the Bill Sponsor John O'Dowd MLA on 13 October 2021. The Committee also wrote to the Department seeking its views and heard oral evidence from the Department on the Bill on 8th December 2021. The Committee also heard oral evidence from the Utility Regulator, NIE Networks, Renewable NI, SSE Airtricity, Dr Patrick Keatley and Power NI. The Minutes of Evidence are included at **Appendix 4**.
30. To assist consideration of specific issues highlighted in the evidence, the Committee commissioned a research paper from the NI Assembly Research and Information Service on the provisions of the Bill and international comparisons.
31. Following issues raised by the Assembly Research and Information Service the Committee sought legal advice in relation to the application of *Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity* ('the 2019 Directive') in the context of the Bill.
32. The Committee carried out informal deliberations on the Clauses of the Bill at its meetings on 12th and 19th January 2022 and undertook its formal clause by clause scrutiny of the Bill on 19th January 2022.
33. At its meeting on 19th January 2022 the Committee agreed its report on the Small-Scale Green Energy Bill and ordered that it should be published.

Consideration of the Bill

34. The Small-Scale Green Energy Bill is a Private Members Bill sponsored by John O'Dowd MLA. The Bill seeks to incentivise microgeneration through the establishment of a specified tariff system, which is to be paid to micro-generators when they export their electricity to the grid in Northern Ireland. The major electricity provider or supplier would be responsible for paying micro-generators.
35. The Bill contains eight clauses and has three main policy objectives
- To place a requirement on major electricity providers and suppliers to provide an obligatory minimum price tariff for exporting micro-generated renewable power into the grid.
 - For the Minister for the Economy to establish a small-scale green energy micro-generation scheme with powers that include setting this minimum price tariff, and to alter it depending on relevant economic conditions (e.g. broader macroeconomic conditions, the unit price of renewable energy and the financial stability of the providers themselves etc.)
 - To provide the Minister with the power to determine what providers are eligible for the scheme by setting a minimum threshold for market share.
36. The Committee's consideration of the clauses of the Bill was informed by the written and oral evidence it received. The Committee received 12 written submissions in response to its call for evidence and heard oral evidence from six of those stakeholders. The Committee also received 45 responses to a public survey on the Bill via Citizen Space. The Committee engaged with the Department for the Economy in terms of its views on the Bill, and in particular in the context of the Energy Strategy 2050 published by the Department in December 2021.
37. A summary of the evidence received in relation to the Bill is outlined below. A copy of the results and comments received on the Committee's online survey can be found at **Appendix 7**.

General Remarks

38. The Committee survey results indicate that 93% of respondents agree that the Department for the Economy should support the growth of small-scale electricity generation in NI through this Scheme. A similar 91% believe that such a Scheme would be of assistance to the Department in the development of the Energy Strategy and the making of any subsequent legislation to support the Strategy.
39. There was a general consensus in the responses received from stakeholders that, whilst the objectives of the Bill in terms of supporting micro-generation are positive, stakeholders believe that it may be premature to legislate in advance of the Energy Strategy. There was a general view that the Bill represents only a small element of energy policy and that policy in relation to small-scale renewables should be considered in the round as part of the wider Energy Strategy.
40. It is important to highlight that many of the stakeholders who responded to the Committee consultation have been closely consulted on the development of the Energy Strategy by the Department over several years. In this context many anticipate that the Energy Strategy will provide a co-ordinated approach and will consider any required legislation, planning and financial support as a whole package.
41. The Department's view is that, while there are merits in the objectives of the Bill, it does not support progression of the Bill at this stage. The Department has stated that the Bill is premature and could result in the raising of electricity costs for the general consumer as the costs for any support schemes are ultimately passed on to them through their energy bills. In particular, there are concerns around the distribution of the costs and benefits of the scheme between different groups of consumers.
42. During its oral evidence on the Bill, the Department stated that electricity is delivered by a combination of generation, transmission, distribution and supply. In its view, the Bill focuses on generation alone and affords value to generation but says nothing about consumption.

43. The Department outlined a number of factors to consider should the Bill progress as follows:

- The need for State Aid approval in the context of NI Protocol;
- Impacts of the requirements under the Electricity Directive;
- and impacts on the network by increased micro-generation capacity which is largely uncontrollable in system management terms.

Clauses 1 – 8

44. **Clause 1** forms the main element of the Bill and requires the Department to make regulations establishing a small-scale green energy scheme for Northern Ireland. The scheme must require major electricity providers to provide a minimum price tariff for micro-generated renewable power exported into the Northern Ireland electricity grid. The scheme must also set targets for major electricity providers to have a specified percentage of their electricity supply sourced from micro-generated renewable power by a date specified in the scheme.

45. The remaining clauses of the Bill are as follows:

- **Clause 2** sets out the supplementary regulations for the scheme and a list of stakeholders who must be consulted when regulations are being set.
- **Clause 3** commits the Department to reviewing the scheme as and when economic conditions change.
- **Clause 4** outlines the rules for the suspension of the scheme.
- **Clause 5** outlines the guidance that the Department may give in relation to the operation of the scheme and its goals.
- **Clause 6** sets out the meaning of specific words and phrases in the Bill.
- **Clause 7** sets out the timing for when it must come into operation.

- **Clause 8** refers to the Short Title of the Bill and is a standard clause.

46. The majority of views expressed were in relation to Clause 1 and the establishment of a scheme in the context of the wider Energy Strategy, the minimum price tariff, targets for renewable power and the net benefits and impact on consumers. A summary of the views is outlined below.

Establishment of a Scheme

47. The Utility Regulator states that any decisions on micro-generation and small-scale renewables would be best taken in the context of Energy Strategy and what provides the greatest carbon savings at the best value to consumers. In addition, it highlights the need to be cognisant of all other laws and requirements regarding the provision of financial support, planning, safety and environmental matters.
48. The Utility Regulator calls for a co-ordinated and controlled approach to advice giving and installation of small-scale and micro-generation. It suggests that this could be taken forward under the Department's Energy Strategy's proposal for a one-stop shop enabling Northern Ireland to avoid problems seen in GB regarding the mis-selling of micro and small-scale generation. The Utility Regulator explains that GB has seen unsuitable installations of small scale and micro-generation leading to some householders and small business failing to achieve the advisors promise that investments in micro-generation would "pay for themselves" under the small-scale FIT.
49. SONI states that it is supportive of increasing micro-generation on the grid in Northern Ireland. It supports the stated objectives of the bill: to reduce dependency on non-renewable generation; reduce harmful emissions from farms and other businesses and; increasing the geographical and sectoral diversity of renewable energy inputs to the NI grid. However, SONI adds that it encourages the alignment of any policy support for small scale renewables with the wider Energy Strategy. SONI outlines that in order for Northern Ireland's energy transition to be a success there must be a system wide plan with measurable targets and clear oversight.

50. Renewables NI highlights that the Department has consulted widely on the Energy Strategy and is best placed to deliver on proposals to support the micro renewables industry. Renewables NI states that it does not believe the proposed scheme provides the right mechanism to grow the micro renewables sector. It states that this Bill may be regressive, in that it would benefit those who can afford to install micro renewables whilst raising network costs for the general consumer, including more vulnerable consumers.
51. Action Renewables states that legislating in advance of the Energy Strategy and the outcome of the Micro-Generation Settlement Consultation, without consideration of renewable energy support in the round, could result in a sub optimal outcome.
52. NIE states that there is a need for holistic, whole systems analysis, including generation of all sizes, electricity network at all voltage levels, all markets and future support schemes in the context of the energy strategy and overall cost implications to the electricity consumer.
53. Power NI believes that to encourage an increase in the levels of microgeneration installation, a support scheme will be required alongside measures such as building regulations to mandate installations on new builds etc. Power NI states that the Bill would set an obligation on suppliers to purchase 5% of their volume from micro-generated renewable power. It adds that, while targets of renewable generation are important in the context of the Energy Transition and Strategic Energy Framework; it is unclear how this target would sit alongside other targets which may be part of the Department for the Economy's Energy Strategy.
54. The Ulster Farmer's Union (UFU) strongly believe that by legislating in advance of the Northern Ireland Energy Strategy (and prior to the outcome of the Utility Regulator Micro-generation settlement consultation) and without any consideration of renewable energy support in the round, could result in a sub-optimal outcome.
55. SSE states that a programme of work and analysis is required as part of the Northern Ireland Energy Strategy in the first instance to ensure a holistic approach is taken. It highlights the need to consider implications of the EU

Electricity Directive and the role of microgeneration in reaching at least 70% renewable electricity by 2030.

56. The RSPB outlines the view that providing any support for microgeneration projects which drive emissions reductions through maximising the contribution of renewables to the energy production mix should prioritise those projects delivering in harmony with nature, and should sit alongside measures to improve energy efficiency and reduce overall energy demand. It adds that the encouragement of communities and individuals to begin using small-scale renewable energy, such as rooftop solar are not only important for delivering emissions reductions with low ecological risk, but also for increasing public engagement in climate action.
57. Dr Patrick Keatley, Centre for Sustainable Technologies, Ulster University states that while he fully supports the concept of maximising the role of domestic consumers in the energy transition, he is concerned that there could be unintended consequences if the Bill proceeds in its current form. He highlights that, historically, such support schemes have largely favoured homeowners with access to capital, at the expense of less affluent citizens, creating in effect middle class subsidies.
58. Both the UFU and Action Renewables have also pointed to the current mechanism, which is currently being reviewed via the Utility Regulators consultation; 'Microgeneration Settlement Consultation'. This consultation seeks to improve the existing process. The UFU states that the Bill is duplicitous in terms of the existing legislation, which is currently being reviewed by the Utility Regulator.

The Minimum Price Tariff

59. 86% of respondents to the Committee survey agreed there should be a fixed minimum price tariff for exporting micro-generated renewable power into the grid.
60. Some views expressed were in relation to the need for a review mechanism that will allow for both increases and decreases in the tariff as up-take and market conditions make appropriate. It was also suggested that companies may simply offer the minimum tariff so there is a need for an incentive to increase it. There is a view that it is essential that people investing in renewables are confident of the investment return and pay back periods.
61. It was also highlighted in the survey that Power NI already provide a regulated tariff for the export of electricity from micro renewables back to the grid. This tariff takes account of factors including forecast wholesale energy prices. Other suppliers are free to offer microgen export tariffs and compete and other players are also active in the market.
62. Similarly, a number of stakeholders highlight that regulated export tariffs are already on offer. Power NI state that a number of providers offer an export tariff in the Northern Ireland market and that there is active competition between those providers for customers who have installed small scale generation.
63. Power NI states that it currently has a licence condition which mandates the provision of an export tariff for small scale renewable generation. This tariff has been in existence for c.15 years and there are currently c.10,000 customers on the Power NI Microgeneration Export Tariff. This represents c.55% of the current microgeneration exporting sites in Northern Ireland. It outlines that customers on the Power NI tariff are paid for their export to the grid on an annual basis. The tariff is set through a regulated process, is reflective of the income achievable by generators in the wholesale market and is approved by the Utility Regulator annually.
64. SSE Airtricity states that the proposal to set a minimum tariff needs to be considered carefully. It outlines that the trend in GB, Ireland and across the EU has been towards remuneration for export on a market-value approach which

takes account of the value of exported electricity to the grid. SSE favours this approach in keeping with what is on offer in GB and planned for Ireland with the Smart Export Guarantee and Clean Export Guarantee policies which facilitates a competitive approach. Under this approach, each supplier is free to set its individual CEG /SEG export tariff, subject to it meeting certain regulatory requirements and exceeding zero Euro cent/kWh or zero Pound pence/kWh.

65. Similarly, Renewables NI refers to the trend in GB and Ireland towards remuneration for export on a market-value approach. Renewables NI also states that Power NI already provide a regulated tariff for the export of electricity from micro renewables back to the grid. This tariff takes account of factors including forecast wholesale energy prices. It also adds that other suppliers are free to offer microgen export tariffs and compete should they wish to do so. There are also other players active in the market. It explains that suppliers can set the export payment as long as it reflects the market value of the electricity exported to the grid and aligns with EU and other regulatory requirements. Renewables NI favours this approach in Northern Ireland in keeping with trends in other jurisdictions.
66. The Electricity Association of Ireland (EAI) states that microgeneration is already a significant feature of Northern Ireland's electricity system due to the support provided to micro-wind and micro-solar under the Northern Ireland Renewable Obligation (NIRO) scheme which closed to new entrants in 2017. It states that it is important to note that Power NI already offer a regulated export tariff and other suppliers are free to do the same and compete should they wish. While, EAI welcomes the intention of the Small-Scale Energy Bill, it does not believe it would be appropriate to seek to support microgeneration.
67. The EAI does not believe it would be appropriate to impose an obligation on suppliers to offer a Microgen tariff in the absence of a market-wide, microgen customer and market settlement arrangement based on real-time data. This market barrier needs to be addressed as part of a framework to efficiently enable the further development of microgeneration and to ensure existing generators are remunerated based on what is actually exported to the grid rather than deemed values/estimates. This can be best facilitated by smart meters.

68. The EAI states that Equity issues need to be addressed first and the potential impact on Network Tariffs before any mandatory obligation could be considered. It outlines the view that, while well intentioned, that this Bill may be regressive, in that it would benefit those who can afford to install micro renewables whilst raising network costs for the general consumer, including those who cannot afford to install micro renewables. These equity issues and potential impact on network tariffs need to be considered as part of a wider approach to microgeneration.
69. The UFU state that this concept will increase domestic energy bills in Northern Ireland and is nonsensical when domestic electricity prices are rocketing and are likely to remain high.
70. The Department in its oral evidence also referred to the fact that Power NI already provides a microgeneration export tariff that is annually approved by the Utility Regulator and that any active consumer can avail themselves of. Therefore, microgenerators have a choice and a route to market.
71. The Department also highlighted recent Ulster University research indicates that, in Northern Ireland, it is the more affluent consumer who can participate in microgeneration, whilst low income and vulnerable consumers face barriers. The Department suggests that under the proposals in the Bill, there is a risk that we would see low-income households pay more on their electricity bills to enable higher-income consumers to save on theirs.

Targets for micro-generated renewable power of 5% by 2025

72. 77% of survey respondents agreed that a small-scale green energy scheme should require “major electricity providers” to have a 5% of their electricity supply sourced from micro-generated renewable power by a specified date of 1st January 2025. 66% agreed that market share is an appropriate way of determining “major electricity suppliers”.
73. Some of the views expressed were that the target may be too low and that there should be a review mechanism and that this should be increased as more

micro-generators invest. Another view was expressed that the target would not do anything to support the roll out of additional microgen technologies, and that to grow this or enable domestic consumers in particular to overcome high upfront costs, investment supports are likely to be needed.

74. A view was expressed that would caution against the setting of any target such as the 5% minimum set out in this Bill. It was stated that analysis of the contribution microgeneration currently makes needs to be undertaken to inform policy-making in relation to microgen. Microgeneration already contributes approx. 120MW to NI's system. It is stated that while it might therefore seem attractive to set a higher minimum limit, there is the risk that this may lead to over subsidisation and additional costs for the general consumer.
75. Power NI states that while targets for renewable generation are important in the context of the Energy Transition and Strategic Energy Framework; it is unclear how this target would sit alongside other targets which may be part of the Department for the Economy's Energy Strategy. Power NI currently estimate that it's microgeneration volume accounts for c0.7% of its total demand and c1.1% of its domestic demand.
76. Power NI suggests that placing an obligation on suppliers raises the question as to how to source the required volume, what are the penalties for failing to meet the obligation and the costs. Given the percentage difference between today's actuals and the proposed target, it implies that a significant premium would either be required to be paid to incentivise the increase in small scale generation installations or some form of additional support mechanism would be required. It highlights that the obligation within the Small-Scale Green Energy Bill would require a licence change(s) and clarity on how compliance would be funded within Power NI's Price Control Framework. It questions whether the obligation should be placed on only a sub-set of suppliers risking distorting competition between suppliers by placing a financial cost burden on some but not all.
77. Power NI believes that any future support mechanism should be linked to total generation rather than export as this encourages onsite consumption and/or

storage. This links well to the net zero/decarbonisation desire to increase the electrification of both transport and heat.

78. In principle, SSE Airtricity does not agree with this proposal as it puts the focus on export rather than self-consumption. It states that the prioritisation and promotion of self-consumption and energy efficiency should be a key focus of microgeneration policy. An emphasis on export sends a signal to consumers that the value of microgen lies in export when the true value is in the ability to reduce energy use and bills.
79. SSE adds that targets in general need to be evidence-based, under-pinned by data and analysis and an assessment of the potential impacts. It states that there is already a considerable amount of microgeneration on the system in Northern Ireland which would likely be close to meeting the 5% suggested target already due to NIRO. It highlights that microgenerators are already in receipt of ROC payments facilitated by suppliers and do not require any additional market incentives.
80. The EAI does not believe the setting of target for suppliers to procure a certain percentage of their supply from microgen will support new microgeneration. It suggests that this proposal puts the emphasis on export rather than self-consumption and energy efficiency which it believes should be given priority. It suggests that the target would not do anything to support the roll out of additional microgen technologies. It states that an economic assessment should be undertaken to determine what may be required.
81. SONI highlights that it is not clear how the proposals would deal with a situation where less than 5% of overall electricity supply could be matched with microgeneration – e.g. if the entire microgeneration installed in NI in 2025 is less than 5% some suppliers may not be able meet the required volumes.
82. Renewables NI does not believe that this is an appropriate or strategic way to encourage greater uptake of micro renewables. It states that it would caution against the setting of any target such as the 5% minimum set out in this Bill. It adds that analysis of the contribution microgeneration currently makes needs to be undertaken to inform policy-making in relation to microgen. Microgeneration already contributes approx. 120MW to NI's system. It highlights that, while it

might therefore seem attractive to set a higher minimum limit, we would reiterate the risk that this may lead to over subsidisation and additional costs for general consumers.

Net benefits and Consumer Impact

83. Renewables NI states that it is critical that future microgen policy in Northern Ireland prioritises self-consumption and energy efficiency-first so that the maximum amount of the energy generated from micro-technologies is consumed onsite. It believes the driver of micro-generation policy should be self-consumption rather than export which is the main focus in this Bill.
84. Renewables NI states that the Bill, as proposed, primarily benefits existing owners of micro generating units many of whom will already be in receipt of ROC payments and those who can already afford to install micro renewable generating units, while passing on costs to the general consumer, including those least able to pay.
85. The Utility Regulator states that as further development of small-scale and micro-generation may require significant additional grid investment decisions to be taken (the cost of which would be passed on to business and domestic consumers) regarding the accommodation of micro-generation on the grid.
86. The UFU highlights that the grid capacity issue remains unresolved meaning that any future small-scale energy projects will be inhibited.
87. NIE outlines that the scale of distributed connection generation to date has been challenging resulting in an electricity network with limited ability to accommodate further export connections without significant upfront costs to the connecting party and the need for widespread network reinforcement. It explains that the cost to the party seeking connection in Northern Ireland is higher than in neighbouring regions by virtue of the method of apportioning costs between the party seeking connection and the and the wider customer base through the socialised charge.
88. NIE states that it appears the Bill's Focus is to incentivise micro-generation on the basis of an export tariff rather than for self-consumption purposes.

Consideration is needed to ensure the tariff does not incentivise significant export from micro-generation which may have a widespread impact on the low voltage electricity network losses. It states that it is not evident that this impact and its associated costs have been adequately assessed. It adds that the consumer may be better off financially by consuming their own generation.

89. SSE states that the implications for the grid also need to be considered particularly given the volume of microgen currently on the system and its invisible and uncontrollable nature. It states that NIE Networks should be asked to consider this. It adds that designing microgen policy in a way that prioritises self-consumption can help reduce impact on the grid bearing in mind the previous point about cost.
90. SSE states that the driver of microgeneration policy should be self-consumption rather than export which is the main focus in this Bill. Self-consumption is where the true value lies for consumers as it provides the ability to reduce energy.
91. SONI states that the main issues, from a System Operator perspective, have experienced with both types of generation, stem from a lack of controllability and visibility. Micro-generation is not currently controllable and therefore cannot be used to improve the security of the electricity system. In some cases it may actually cause the security of the system to be diminished as large conventional generators, which are relied upon for system security and system services are taken offline, and large scale renewable generator outputs are reduced in response to diminished load. If micro-generation is to be incentivised, consideration should be given to the impact that it could have on the electricity system as a whole and should include the incentivisation of appropriate controls.
92. Dr Keatley states that current collaborative work between Ulster University and the NI Housing Executive is seeking to prioritise the role of social housing tenants and lower income households in delivering a net zero energy system. He adds that without modification the Bill creates the risk of leaving behind people who are not homeowners, who lack finances or do not feel technically confident enough to take advantage of microgeneration schemes.

93. NIE states that as the Single Electricity Market becomes increasingly renewable, the electricity supplied into our homes will also become increasingly renewable. Therefore, it is not possible to state that offsetting import or exporting renewable micro-generation will have a net positive benefit in terms of renewable electricity production/consumption.
94. The EAI believes it is critical that future microgen policy in Northern Ireland prioritises self-consumption and energy efficiency-first so that the maximum amount of the energy generated from micro technologies is consumed onsite. This is where the true value lies for consumers. An over-emphasis on export could lead to perverse incentives to over-install in the hope of achieving maximum payments.
95. The Department in its oral evidence stated that any scheme that is developed under the proposed legislation could increase costs; reduce reliability and, therefore, security of supply; and, ultimately, increase emissions through reliance on a higher level of baseload thermal generation. It stated that the Bill threatens to impose a duty on the Department to create a scheme that is based on a policy that is not tested, to generate outcomes that are unknown, and to compel instability on an aspect of the critical infrastructure that is necessarily judged on its dependability.

Micro-generated renewable power – 50kw

96. The Bill defines micro-generated renewable power at a maximum of 50kw.
97. The area where there was more of a divergence of opinion from survey responses on the Bill was in relation to whether micro-generated renewable power should be defined at a maximum of 50kw. 46% of respondents answered yes and 37% answered no.
98. Some survey comments suggest that the target for renewable could be achieved sooner if there wasn't a limit. Another respondent suggested this could lead to a corporate rollout of small inefficient generators rather than benefit small business and domestic customers.

99. SSE state that this definition of microgeneration is appropriate in its view though this should be assessed by NIE Networks.
100. Renewables NI also agree with this definition.

Objectives of the Scheme

101. The Bill provides that in making scheme regulations the Department must have regard to the objectives (“the small-scale green energy objectives”) of—
- a. reducing dependency on non-renewable electricity supplied by the Northern Ireland electricity grid;
 - b. reducing environmentally harmful emissions from farms and other businesses; and
 - c. increasing the geographical and sectoral diversity of renewable energy inputs to the Northern Ireland electricity grid.
102. An average of 92% of survey respondents agreed with inclusion of the three objectives within the Bill to be considered by the Department when devising a small-scale green energy scheme.
103. There were a number of alternative objectives suggested by respondents to the Committee Survey (see **Appendix 7**) including:
- To promote local design, engineering and innovation to develop global products that can contribute to the local economy.
 - To sell directly to customers through an embedded generation system.
 - Energy efficiency— Northern Ireland’s approach should be based on the principle of energy efficiency first to ensure that solar panels installed can be utilised to the greatest extent within the building and energy generation is not needlessly lost.
 - Self-consumption should be prioritised and promoted as the main benefit of microgeneration.

- Equity - while well intentioned, this Bill may be regressive in that it would benefit those who can afford to install micro renewables whilst raising network costs for the general consumer.
- A commitment to energy conservation.

104. Renewables NI was supportive of the objectives outlined in the Bill. It added that energy efficiency, self-consumption, equity and cost effectiveness should also be key considerations.

105. The RSPB states that Clause 1(6) of the Bill as introduced, should take into account the need for the robust assessment of any potential environmental impacts of small-scale green energy schemes under its objectives, over and above the current requirement to reduce environmentally harmful emissions from farms and other businesses. It fails to examine the energy generation process which could fall under the parameters of this Bill, or the potential environmental impacts of the fuel source itself. In this regard, it does not seek to prevent any perverse outcomes via the growth of other sectors to provide fuel for small scale green energy production.

106. The RSPB also outlines that Clause 1(6)(c) of the Bill as introduced, which seeks to increase the geographical and sectoral diversity of renewable energy inputs to the NI electricity grid fails to recognise the need for this to be in areas of low ecological risk, when not placed on existing buildings.

Technologies

107. The Bill provided that renewable power should consider, in particular, the inclusion of—

- wind power;
- solar power;
- combined heat and power technology;
- bio-fuels; and

- hydroelectric power.

108. 88% of survey respondents agreed with the main technologies outlined.
109. Renewables NI supports the three main micro generation technologies within the Bill.
110. The RSPB comments in detail on the technologies outlined in the Bill. While RSPB supports the increased roll-out of onshore wind in harmony with nature, not only does this require deployment to be focussed in areas of low risk for wildlife, but consideration also needs to be given to the potential implications and cumulative impacts of microgeneration technologies when rolled out at scale. For example, a number of small scale individual wind turbines, if installed in multiple numbers across a proximate area can effectively constitute a windfarm, which would benefit from being considered strategically.
111. The RSPB supports the ambition to accelerate solar deployment and believes this should urgently be progressed as rooftop and PV farms.
112. In relation to hydro, the RSPB states that given such potential risks to the natural environment, any incentives to encourage communities and individuals to begin using small-scale hydro power require to be set within a strong policy context where any financial support/contribution must ensure that decarbonisation through hydro is in harmony with nature. On bioenergy crops the RSPB refers to a recent studies which indicate ‘direct land use change to grow bioenergy crops can increase net greenhouse gas emissions if carbon rich ecosystems like wetlands, forests and grasslands are destroyed in the process’.

Clause by Clause Scrutiny

113. As the Committee decided to reserve its position on the Bill it did not undertake a clause by clause scrutiny and agreed to present the evidence it received as part of this Committee Report for consideration by the Assembly should the Bill proceed to Consideration Stage.

Links to Appendices

Appendix 1: Memoranda and Papers from the Department for the Economy

View Memoranda and Papers supplied to the Committee by the Department for the Economy:

- 17th August 2021 - [Departmental Response - Small Scale Green Energy Bill](#)
- 21st November 2021 - [Departmental Response - Small Scale Green Energy Bill](#)

Appendix 2: Memoranda and Papers from Others

View Memoranda and Papers supplied to the Committee by the Department for Communities:

- [Correspondence in relation to Assembly Research and Information Service \(RaISe\) briefing paper – Small-Scale Green Energy Bill](#)

Appendix 3: Minutes of Proceedings

View Minutes of Proceedings of Committee meetings related to the report:

- [6th October 2021](#)
- [13th October 2021](#)
- [20th October 2021](#)
- [3rd November 2021](#)
- [10th November 2021](#)
- [17th November 2021](#)
- [24th November 2021](#)

- [1st December 2021](#)
- [8th December 2021](#)
- [15th December 2021](#)
- [12th January 2022](#)
- [19th January 2022](#)

Appendix 4: Minutes of Evidence

- [13th October 2021 - Small-Scale Green Energy Bill: Mr John O'Dowd
MLA](#)
- [20th October 2021 - Small-Scale Green Energy Bill](#)
- [3rd November 2021 - Small-Scale Green Energy Bill](#)
- [10th November 2021 - Small-Scale Green Energy Bill](#)
- [17th November 2021 - Small-Scale Green Energy Bill: Northern Ireland
Assembly Research and Information Service](#)
- [17th November 2021 - Small-Scale Green Energy Bill: Power NI](#)
- [24th November 2021 - Small-Scale Green Energy Bill: Dr Patrick Keatley,
Ulster University](#)
- [24th November 2021 - Small-Scale Green Energy Bill: Renewable NI;
SSE Airtricity](#)
- [1st December 2021 - Small-Scale Green Energy Bill: NIE Networks](#)
- [1st December 2021 - Small-Scale Green Energy Bill: Northern Ireland
Authority for Utility Regulation](#)
- [8th December 2021 - Small-Scale Green Energy Bill: Department for the
Economy](#)
- [15th December 2021 - Small-Scale Green Energy Bill](#)

- [19th January 2022 - Committee Report](#)

Appendix 5: Written submissions

- [Action Renewables](#)
- [Electricity Association Ireland](#)
- [Individual](#)
- [NIE Networks](#)
- [Power NI](#)
- [Renewables NI](#)
- [SONI Ltd](#)
- [SSE Airtricity](#)
- [RSPB NI](#)
- [Ulster Farmers' Union](#)
- [Ulster University](#)
- [Utility Regulator](#)

Appendix 6: Research Papers

View Research Papers produced by the Assembly's Research and Information Service (RaISe) in relation to the report.

- [26th October 2021 - Assembly's Research and Information Service \(RaISe\) Small-Scale Green Energy Bill](#)
- [Supplementary Information Small Scale Green Energy Bill](#)

Appendix 7: Other Documents relating to the report

View other documents in relation to the report

- [Committee for the Economy – Energy Strategy Micro Inquiry Report](#)
- [Citizen Space Survey Summary Report](#)
- [Delegated Powers](#)

Appendix 8: List of Witnesses that gave evidence to the Committee

Witness Name(s)	Organisation
Mr Philip Carson Mr William Steele	Power NI
Dr Patrick Keatley	Centre for Sustainable Technologies, Ulster University
Ms Sinead Ferris Mr Ronan McKeown	NIE Networks
Mr Stephen Agnew	Renewables NI
Mt Stuart Hobbs	SSE Airtricity
Mr John French Mr Kevin Shiels	Northern Ireland Authority for Utility Regulation

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