

Energy Strategy

Department for the Economy
Netherleigh
Massey Avenue
Belfast
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FSB Northern Ireland response to the Energy Strategy Call for Evidence

FSB is the UK's largest business organisation, with around 165,000 members in total, including around 6,000 in Northern Ireland, across all sectors of industry and business. Established over 40 years ago, we are a non-profit making and non-party political organisation that's led by our members, for our members. Our mission is to help smaller businesses achieve their ambitions.

Northern Ireland is a small business economy, with the highest concentration of SMEs in all the regions in the UK: 98% of all firms employ fewer than 20 people, while 95% employ fewer than ten. Northern Ireland SMEs provide 75% of all private sector jobs, and two-thirds of private sector turnover.

As experts in business, we offer our members a wide range of vital business services, including advice, financial expertise, support and a powerful voice in government.

The Federation lobbies decision makers to create a better business environment and welcomes this opportunity to respond to this call for evidence on the Energy Strategy, on behalf of our members across Northern Ireland. We trust that you will find our comments helpful and that they will be taken into consideration.

Please do not hesitate to contact us if you have any queries and we look forward to continued engagement with the Department as you progress with the Environment Strategy, and any related policies.

Yours faithfully,

Tina McKenzie

FSB Northern Ireland Policy Chair

FSB Northern Ireland response to the Energy Strategy Call for Evidence

SMEs account for over 70% of turnover in the private sector, compared to just over 50% in the whole of the UK; and for nearly 75% of all private sector employment in Northern Ireland. They employ more people than all large businesses and the entire public sector combined. When society talks about people going to work, when they talk about businesses, when they talk about industry, when they talk about our economy, they are talking about small businesses. Therefore, to enable transition to a sustainable energy system, government must 'think small first' and find ways of engaging and supporting the SME community throughout the process.

Small businesses recognise and support the broad, long-term objectives of policies on climate change and environmental sustainability that are being devised and implemented to help transition our energy systems in Northern Ireland. Well-designed policies will help us move towards a more sustainable, more productive economy, which will help meet the aspirations of the Paris Accords.

Our members are clear that small businesses want to do the right thing and play their part. A long-term, strategic approach to environmental policy making will be much better than short-term, reactive policies, but all policy solutions must be evidence led.

Given the dependence of the Northern Ireland economy on small businesses, there are a number of overarching principles that will help decision makers to realise our joint ambitions effectively, but which mitigate the potential barriers that may face our SMEs:

- The potential impact of policies on small businesses must be understood in granular detail;
- Small businesses need adequate time to adapt to new requirements;
- Small businesses least able to adapt should be identified and provided with additional support.

The following sections outline key considerations for the Department in drafting the next Energy Strategy. FSB looks forward to the publication of a draft strategy resulting action plans, and to responding to further consultation in this regard.

ENERGY STRATEGY CALL FOR EVIDENCE

FSB NORTHERN IRELAND'S RESPONSE



60%

of small businesses say **security of supply** is their top energy **priority**

61%



say **energy** is a **significant cost** to their business



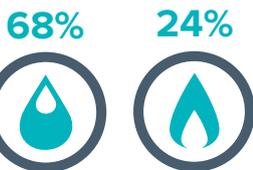
45%

of small businesses identify **renting or leasing their premises** as a major obstacle to **energy efficiency**

70%



of small businesses support **energy efficiency** to protect the **environment**



92%

of premises in Northern Ireland use **oil** or **gas** for **heating**



47%

of micro businesses would consider **generating** their own electricity to avoid **excessive prices**



93%

of small business energy generators **own their own properties**

93%



of small businesses identified **cars** as important to their business

Governance

Northern Ireland is currently the only part of the UK without a set climate change goal. The Climate Change Act 2008 (2050 Target Amendment) Order 2019 commits the UK as a whole to net zero emissions by 2050, with legally-binding targets. There are similar commitments and targets in Scotland and Wales, however, no such equivalent mechanism currently exists in Northern Ireland. Accordingly, we welcome the inclusion of a Climate Change Act in the New Decade, New Approach deal agreed by the Stormont parties and the two governments.¹ Placing commitments and targets onto a statutory footing is necessary if we are to give policy certainty to small businesses.

We believe that consideration should be given to the appointment of a dedicated Energy Champion to oversee the Strategy and ensure joint and co-ordinated working between the multiple departments with policy responsibilities, as well as the Utility Regulator and wider UK bodies.

FSB is of the view that, in addition to long-term strategies and targets, shorter term targets should be set and reviewed annually, together with departmental roadmaps of how such goals and outcomes are to be achieved using, for example, a ten-step approach to change. Keeping the agreed targets in mind, policy must be evidence-led at all times and, whilst being regularly re-evaluated to identify which actions are succeeding, consideration must be given to the consequences of changing policy at short notice.

The evidence base must include consultation with small businesses, and therefore engagement with the small business community needs to be maximised. We urge departments always to consider the needs of SMEs in implementing all aspects of a new Energy Strategy for Northern Ireland.

Any new arrangements will be most effective if small businesses have sufficient time to prepare and adapt, particularly if this includes replacing their current energy systems, as this will require significant capital investment. Small businesses which find it hardest to adapt, whether for financial or practical reasons, need to be quickly identified and provided with additional support.

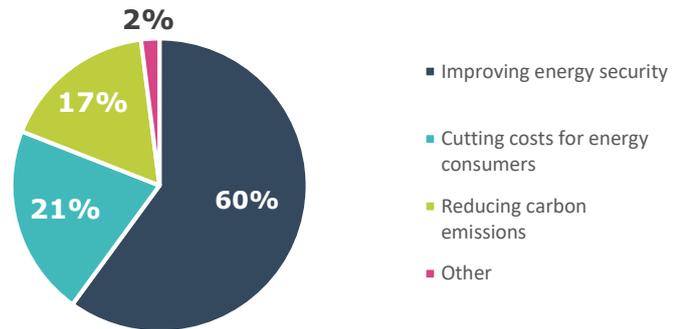
Security of Supply

When we asked our members to specify their priorities in relation to the three main aspects (security, sustainability and affordability) of a future Energy Strategy, 60 per cent of small businesses identified 'security of supply' as the most important issue to be addressed. Only 21 per cent said that 'cutting consumer costs' was their main priority, while 17 per cent chose 'reducing emissions'.²

¹ UK Government & Irish Government, (2020), *The New Decade, New Approach Deal* Available at: www.gov.uk/government/news/deal-to-see-restored-government-in-northern-ireland-tomorrow

² FSB, (2017), *The Price of Power: Energising Small Business in the Next UK Carbon Plan*

Figure 1: Small business views on priority areas for energy investment
Source: FSB energy infrastructure survey 2016



Fuel Source

The reliance on fossil fuel imports to power our energy system is of concern, with 86% of small firms believing that the UK is too reliant on imported energy.³ Northern Ireland in particular is reliant on oil and other petroleum products for both home heating and transport, exposing consumers to greater price volatility, caused by forces beyond their control. Currently market pressure is suppressing the cost of both oil and gas; however, price changes will continue to occur, including a continued potential for significant price increases.

While there has been a reduction in the proportion of our electricity produced from coal or gas, fossil fuels still accounted for 57.6% of all electricity generated in Northern Ireland in 2018 (primarily through natural gas).⁴ A major cause for the reduction in fossil fuel use for electricity generation has been the growth in renewable generation, but the intermittent nature of those renewables needs to be addressed to move forward. Wind and solar technologies require flexible capacity (currently from gas and coal fired plants) to ensure security of supply. Shifting to a decarbonised energy system will require flexible capacity and demand solutions, given that the majority of our renewables currently come from intermittent sources. Developments in biogas and energy storage will doubtless have a positive role to play.

Energy Demand

The Department, Regulator, and network and distribution systems need to prepare for increased demand on our electricity system due to economic growth, combined with decarbonisation of heat and transport. Despite the trend for a reduction in the link between economic growth and energy demand, the electrification of heat and transport will increase demand for electricity.

While there is movement away from traditional industrial-based economic activity to more service-based activity, which can often use less energy, some service industries can actually increase demand, particularly in the tech sector. For

³ FSB, (2017), *The Price of Power: Energising Small Business in the Next UK Carbon Plan*.

⁴ <https://www.gov.uk/government/statistics/energy-trends-december-2019>

example, in the Republic of Ireland, EirGrid reports that 29% of total electricity demand will come from data centres.⁵

Grid Connections

The electricity grid needs to be further developed in order both to facilitate greater use of renewable energy sources and ensure regionally balanced economic growth.

Our members tell us that they are cancelling or delaying investment decisions, such as building new factories, or installing new machinery, because the grid cannot cope with increased demand. This is particularly problematic in the west of Northern Ireland. There are also businesses that want to install microgeneration facilities but are unable to do so due to constraints in connecting to the grid.

These issues need to be addressed urgently in order not to dampen economic growth in this way, nor to place barriers in the way of carbon reduction.

North-South Interconnector

FSB is keen to see progress on the development of the North-South Interconnector, as we anticipate an increase in efficiencies in the system, with a consequent downward pressure on costs for energy consumers. All-island savings each year are estimated to be in the region of £25.5m, and likely to grow over time.⁶ Importantly, the N/S Interconnector will also help secure supply, and allow a greater number of renewables to be generated by increasing flexibility in the system, thus alleviating the pressures on all three components of the energy trilemma.

The construction of the North-South Interconnector must be a priority for the new NI Executive, without any further delays.

Small Businesses as Consumers

Previous research by FSB around small businesses as consumers identified a number of areas where the smallest businesses are disadvantaged compared to large businesses and domestic consumers in utility markets.⁷ These disadvantages include:

- **Lack of expertise in purchasing energy.** Most small businesses have a similar level of expertise as a domestic customer when purchasing most products and services and they are far less likely than large businesses to have staff with a specific procurement role.
- **High opportunity cost of time spent making purchasing decisions.** Running a small business generally takes up the majority of the owner's

⁵ EirGrid, (2019), All-Island Generation Capacity Statement 2019-2028
Available at: <http://www.eirgridgroup.com/site-files/library/EirGrid/EirGrid-Group-All-Island-Generation-Capacity-Statement-2019-2028.pdf>

⁶ Grant Thornton, (2017), *Strengthening the all island electricity market by 2020*

⁷ FSB/CCP, (2004), *Small Businesses as Consumers: Are They Sufficiently Well Protected?*

time during the working week, and often the weekend. This leaves limited time to concentrate on non-core activities such as renegotiating contracts. Therefore, the 'opportunity loss' associated with searching for a new energy supplier can be high.

- **Low benefits (actual or perceived) of time spent making purchasing decisions.** A small business will typically have relatively low requirements for products and services that are not directly linked to its core trade – they want their heating to work and lights to be on, without having capacity to spend time on brokering.
- **Poor bargaining power.** Smaller businesses have far less bargaining power, especially compared to large companies such as major utility service providers.

The government must ensure that microbusinesses are treated fairly in the non-domestic energy retail market, including a requirement that the Utility Regulator extend the same information, choice and protections to smaller non-domestic consumers those offered to domestic consumers.

Energy costs

Most businesses describe their energy costs as moderate or high, with a clear correlation between size of business and perceptions around affordability of energy. Around 48 per cent of sole traders believe their energy costs are significant enough to impact on the profitability of their business. However, this figure increases for microbusinesses (64%) and rises even further for medium-sized businesses (82%).⁸ While there has been much focus on the costs of policy interventions, such as taxes and levies, or network and distribution costs, the most significant element of the cost of energy is the cost of generating the electricity itself, which is primarily dependent on fluctuating global markets. The Committee for Climate Change has noted that the cost of onshore wind and solar PV is already lower than that of new fossil-fired generation, so greater use of renewable generation should reduce prices.⁹

Energy Efficiency

Energy efficiency plays an increasingly important role in managing grid capacity and reducing carbon emissions. In 2015, the then UK Department for Energy and Climate Change estimated that the average SME could reduce its energy bill by 18-25 per cent by installing energy efficiency measures, with an average payback of less than 1.5 years.

FSB research from 2015 found that the vast majority of FSB small businesses (90%) said they wanted to be energy efficient and acknowledged the direct benefits of energy efficiency (86%). The majority of FSB small businesses thought

⁸ FSB, (2017)

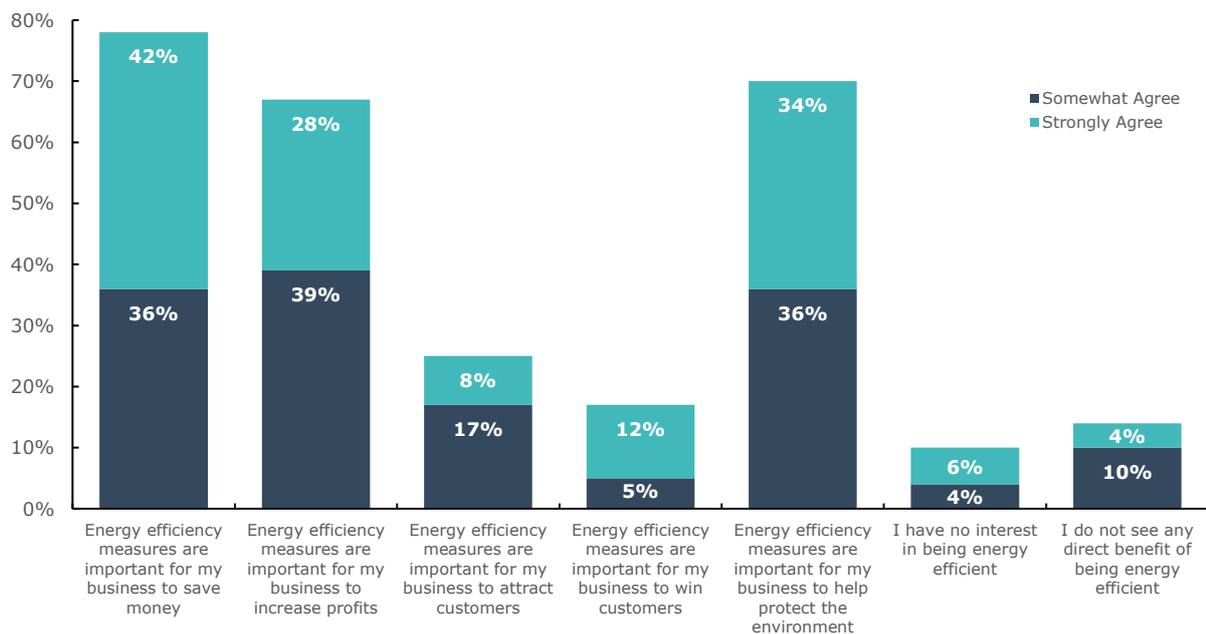
⁹ Committee on Climate Change, (2019), *Reducing emissions in Northern Ireland*

energy efficiency was important for saving money (78%), protecting the environment (70%) and increasing profits (67%).

Well-targeted support and information would help smaller businesses to make these savings wherever possible.¹⁰

Figure 2: Small business views on efficiency
Source: FSB energy infrastructure survey 2016

To what extent do you agree with each of the following statements?



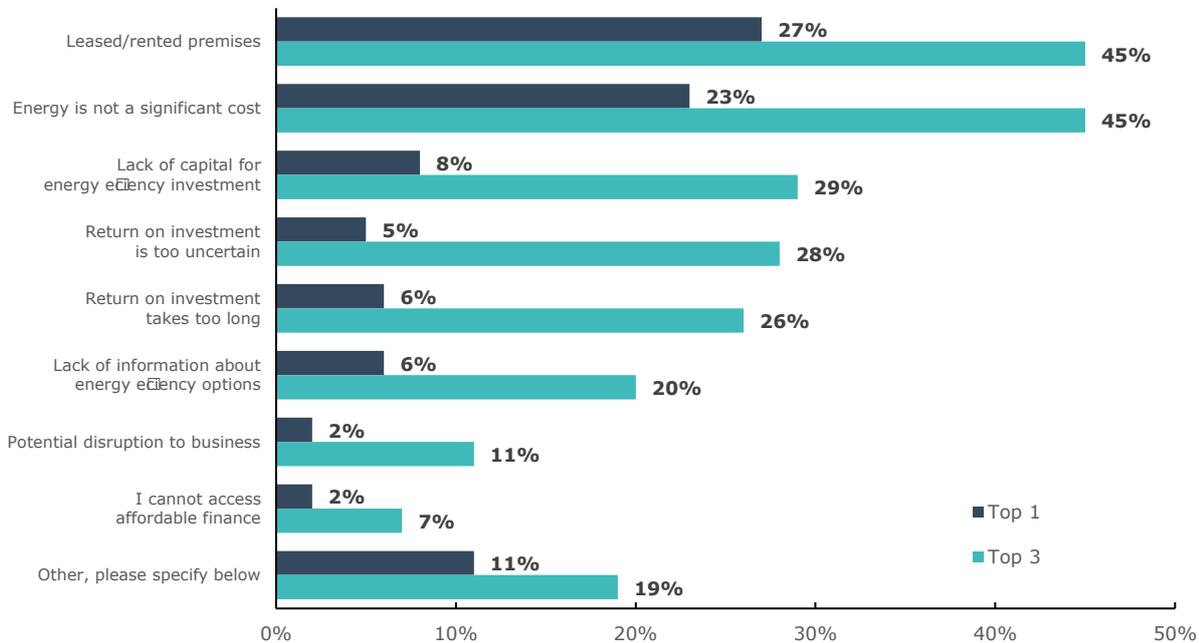
Barriers to Energy Efficiency

Currently, engagement with small businesses on energy issues rarely involves any meaningful segmentation or sub-division of this audience into more homogeneous groups. The needs of SMEs are not necessarily best analysed through the lens of industrial sector or size alone. Many factors may result in different experiences and relationships with the energy system. A one-size-fits-all approach to promoting efficiency is not realistic in achieving maximum behavioural change.

Despite the high number of businesses recognising the value of energy efficiency measures, not all firms are taking action and far fewer are making significant changes. The main reported issue preventing many small businesses from becoming energy efficient is because they lease/rent premises (45%) rather than owning them.

¹⁰ Department of Energy and Climate Change, (2015), *SME Guide to Energy Efficiency*

Figure 3: Obstacles to small business energy efficiency
Source: FSB energy infrastructure survey 2016



However, while the opportunity to save money is obviously important to every business, saving cost and reducing outgoings are certainly not the only drivers for energy efficiency, and must be balanced against the cost of the time and effort required to achieve this (the ‘opportunity costs’). In addition, such decisions can be severely hampered by a lack of certainty that investment will actually achieve the desired benefits.¹¹ There are also a variety of motivations, other than cost savings, including environmental responsibility, profit margins and attractiveness to customers.

Improving access to finance is essential to energy transition, as many initiatives such as retrofitting buildings, will require large, upfront capital spending, requiring access to finance. It is vital that the government considers a ‘green finance’ programme that will either provide or guarantee loans to small businesses to enable them to access the capital needed to implement energy efficiency measures,.

Smaller businesses that seek external finance face a number of challenges, for example, younger firms are often ruled out of traditional debt finance due to a having a short trading history. In addition, many smaller businesses find credit options for this sort of initiative to be relatively scarce. According to FSB’s most recent Small Business Index, 35% of small business owners say credit availability is very poor or quite poor; just 28% per cent feel credit is readily available; 40% of

¹¹ FSB, (2017)

small business owners say credit affordability is very poor or quite poor; and only 28% say credit is affordable.¹²

Data and Smart Meters

By 2024 around 53 million smart meters will be fitted in more than 30 million households and businesses across England, Scotland and Wales. The roll-out, and the associated move to a more dynamic market, provides opportunity for customers to take greater control of their energy use and reduce their consumption by monitoring and managing. According to surveys by Smart Energy GB, as many as 85% of people with smart metering installed have found ways to reduce energy consumption.

However, there are no plans at present to roll-out smart meters in Northern Ireland, despite ongoing plans in Great Britain and the Republic of Ireland, and it does present a situation where Northern Ireland could very quickly be left behind in the energy transition.

Decarbonisation of Heat

Decarbonised heating will require the phasing out of fossil fuel usage, including oil and natural gas. Carbon capture and storage might, at some point, offer some part of the solution but at the moment the technology is still in the development stage.

The main measure taken to date has been the transfer from home heating oil (on which Northern Ireland has a particular dependence) to gas, which has a lower carbon output but is still a fossil fuel. Therefore, while the continued roll-out of the gas network will help lower the carbon intensity of heating, it is not a long-term solution, as greenhouse gas emissions are still too high to enable us to meet our targets, so more drastic action may be needed at a later date. Notwithstanding, the gas network does allow the potential for adoption of non-carbon or non-fossil fuel gases such as hydrogen or biogas.

In addition to the scale of challenge of transitioning a very large number of properties away from oil, consideration needs to be given to the impact on the home heating oil sector, which employs over 10,000 people locally, either directly or indirectly.¹³

Finding an acceptable pathway for those businesses to diversify into non-petroleum based products will be an essential component of the Energy Strategy.

It is unlikely that there will be a single off-the-shelf solution that will meet our heating needs. There will be a role for electrification, hydrogen, biomass and biogas, district heating and geothermal heating and perhaps others. The Department should develop separate action plans, with well-regulated incentive

¹² FSB, (2020), *Voice of Small Business Index, Quarter 4, 2019*, available at: <https://www.fsb.org.uk/resources-page/fsb-sbi-q4-2019-pdf.html>

¹³ Available at: nioil.com

schemes to drive behavioural change, with a clear purpose being the roll-out of these technologies and solutions.¹⁴

Small Businesses as Electricity Generators & Suppliers

The ongoing decarbonisation of electricity in Northern Ireland has been successful in recent decades, with 44 per cent of all reductions in greenhouse gas emissions having come from decarbonising our energy supply.¹⁵

Northern Ireland generated 37% of its electricity needs from wind power in 2019, one of the highest levels in Europe.

While offshore wind offers an opportunity to develop large scale renewable capacity, barriers remain that must be overcome. For example, a County Down offshore wind farm that could have supplied up to 13% of Northern Ireland's electricity starting this year, was cancelled in 2014.¹⁶ Last year, the Department determined that the "conditions are not yet right for fixed foundation offshore wind development around Northern Ireland's coastline", and indicated that development of alternative technologies, such as floating wind platforms, could enable more offshore wind generation.¹⁷

A feasibility study should be carried out to map the barriers to these technologies and determine what would be needed for Northern Ireland to become a leader in this field. Notwithstanding, a diverse group of technologies providing our renewable energy is the best way to ensure affordability, security and market penetration of renewables. Increased uptake of other technologies, including solar PV, onsite battery storage and biogas, is needed.

Intermittent renewable generation, particularly wind and solar, will continue to require flexible capacity to ensure security of supply. Currently that security is underpinned by coal and gas power plants but, if we wish to develop a decarbonised energy system in the future, supply security must come from elsewhere, particularly biogas and energy storage. Biogas provides opportunities for rural economic diversification, reduction in our greenhouse gas emissions and the opportunity to use clean gas to decarbonise natural gas or provide generation capacity to help support intermittent renewable generation. The Department should develop separate action plans to encourage large scale storage, localised storage and biogas.

¹⁴ Policy Eye Northern Ireland, (2019), *Vision 2050: Options for a New Northern Ireland Strategic Energy Framework*

¹⁵ Department of Agriculture, Environment and Rural Affairs, (2019), Northern Ireland Greenhouse Gas Emissions 2017 Available at: <https://www.daera-ni.gov.uk/articles/northern-ireland-greenhouse-gas-inventory>

¹⁶ BBC News, (2014), "County Down offshore wind farm plans scrapped" Available at: <https://www.bbc.co.uk/news/uk-northern-ireland-30280697>

¹⁷ Department for the Economy, (2019), *ORESAP 2012-2020: Progress Report 1 April 2018 to 31 March 2019* Available at: www.economy-ni.gov.uk/sites/default/files/publications/economy/ORESAP-progress-report-to-March%202019.pdf

The closure of the Renewables Obligation in 2017, and the decision not to join the UK Contracts for Difference scheme, has left Northern Ireland as the only part of the UK not to have a support mechanism for the renewables industry. The SONI and EirGrid forecast of renewable capacity does not include any additional development beyond 2020.¹⁸ A new, long-term support mechanism for renewables is urgently needed in Northern Ireland, to provide certainty and a fixed revenue stream for generators.

Barriers to Microgeneration

Microgeneration provides an opportunity for small businesses to invest in solutions that work for them, reducing their dependence on a centralised energy grid and helping to reduce carbon emissions.

47 per cent of microbusinesses indicate that they would consider generating their own electricity to avoid paying expensive energy prices.¹⁹ However micro-generators are being discouraged in the market through a combination of regulatory, policy and practical constraints. The type of business, and where the business operates from, is a major determining factor in their ability to micro-generate: 93 per cent of small business energy generators own their properties, while 61 per cent either work from home or operate from premises attached to their homes.²⁰

FSB would like to see the Department produce a holistic strategy for promoting microgeneration and storage across the small business community, one which creates a more detailed understanding of the different and varied circumstances of small businesses, their relationships with energy, the types of premises they either rent or own, and the consequential opportunities and obstacles they may face. We urge the Department to look at the particular issue related to disempowered small businesses in rented premises. Pathways to generation, either by empowering renters, or by providing incentives and commitments for property owners, are needed.

In addition to incentives and subsidies for microgeneration and storage, the Department should consider the wider regulatory environment (including planning permission in particular), access to reliable information, and access to finance. A dedicated advisory service, coupled with a 'green finance' programme either to provide or guarantee loans to small businesses to enable them to access the capital needed to install energy generation and/or storage should be explored and implemented.

Transport

Research by FSB in 2015 asked small businesses to think about the means of transport used to access their business - by themselves, their employees,

¹⁸ Committee on Climate Change, (2019)

¹⁹ FSB, (2019), *Energy Market Survey*

²⁰ FSB, (2017)

customers and suppliers: 93 per cent of respondents said cars were important to their business and 64 per cent said vans were important.²¹

Figure 4: The importance of different vehicles to small businesses

Source: FSB Survey (2015)

Vehicle	"Important" (%)	"Very Important" (%)	NET Important (%)
Car	22	71	93
Van	24	40	64
Lorry	21	29	49
Bus	22	10	32
Train	23	10	33
Walking	25	14	39
Cycling	16	5	22
Other	10	7	17

Many small businesses rely on cars and other vehicles, including HGVs, for deliveries into and out of their premises, as well as for transporting themselves. Rather than seek the eradication of vehicle use or an excessive emphasis on public transport, which are inconsistent with both the realities of the demographics of Northern Ireland and employment catchment areas, it would be reasonable to focus on a shift from conventional vehicles to ultra-low emission vehicles (ULEV). While sales of purely electric vehicles more than doubled in 2019, they still amount to less than 1% of new car sales in Northern Ireland, showing that there is a vast amount more to be done.

Policy mechanisms for encouraging the take-up of ultra-low emission vehicles are urgently needed. They are still more expensive to purchase than their petrol and diesel equivalents and the supporting infrastructure is insufficient. However, the Department should review the plug-in car and van grant to determine how it can be improved. A new and robust policy environment in this area could rapidly give confidence to the SME sector that would see the widespread adoption of electric vans to replace the existing stock in a short period.

Given the right support and policies the SME sector could respond well, and quickly, but it needs to be coupled with expansion in ULEV infrastructure. Provision of charging points, enhanced electricity generation capacity, and grid flexibility all need to be considered in advance of increasing the demand for ULEV.

²¹ FSB, (2017), *Clearing the air: Supporting small businesses in tackling air quality in England*

Carbon Capture, Utilisation and Storage

The UK Government is taking steps to become a world leader in the deployment of Carbon Capture, Utilisation and Storage technology (CCUS). The largest project, run by Tata Chemicals, a sodium carbonate producer, will remove carbon dioxide from their power plants, purifying and liquefying it for use in its production chain. It will remove an estimated 40,000t of carbon dioxide annually, which is the equivalent of removing 22,000 cars from the road.

Stormont policy makers should consider similarly ambitious action plans, to enable Northern Ireland also to become a world leader in this technology. The technology holds potential not only for helping us meet our climate change goals but also creating an attractive place to invest for industries that utilise carbon dioxide in their production chains.

Skills

The energy transition will alter our skills needs, as businesses, workers and entrepreneurs adapt to the new arrangements and requirements. Many aspects of the new Energy Strategy, including energy efficiency measures, retrofitting, microgeneration, heat pumps and many more, will require a workforce skilled in their installation and maintenance. A skills impact assessment of policies should be undertaken, to help determine whether businesses have access to the skills needed to comply with any new policy or action plan.

For example, the colleges engaged successfully with the gas sector to deliver apprentices capable of working in the plastic pipe connection aspect of the roll out of natural gas. In Scotland, the nuclear industry spawned a major pipeline of nuclear engineers being trained at University there. We need to link the emergent decarbonisation opportunities with relevant skills training so that we turn the need to transform our energy systems into economic transformation as well.

Conclusion

The production of a new Energy Strategy for Northern Ireland is welcome. The transformation from long-established carbon-based energy to much cleaner low and zero-carbon fuel is a massive challenge, matched only by the scale of the associated economic opportunity.

With the right vision and determination, we should be able not only to devise new systems and technologies to ensure Northern Ireland sets and meets a target of “net-zero by 2050” but develops expertise, products and services that can be exported to other parts of the world. In so doing, we not only help reduce the planet’s carbon outputs, but we grow our local economy with the type of exported goods and services in high value sectors that will benefit all of us.

SMEs have always played their part in the economy and made massive contributions in the sort of R&D that will achieve this. The challenge for policy-

makers is to assist and harness this innate expertise and ingenuity; a new Energy Strategy could be a key part of this objective.