



Llywodraeth Cymru
Welsh Government

Stronger, Fairer, Greener Wales:

Net Zero Skills Action Plan



Ministerial Foreword



Vaughan Gething

Vaughan Gething MS
Minister for Economy

A stronger, fairer, greener Wales means an economy that works for everyone.

Skills will be a key enabler as we transition to a net zero economy. Everyone needs to take responsibility and play their part in taking action to improve practices, investing in people and communities to innovate and build a more resilient economy. This is just the start of this process and Government cannot tackle the challenge alone. A Team Wales approach is the only way we can drive forward these changes and meet our net zero commitments.

The Programme for Government made clear our focus on driving a stronger, more competitive Welsh economy by narrowing the skills divide and tackling inequality – to boost good jobs and lift people out of poverty.

In Net Zero Wales (2021), we re-stated our commitment to a just transition away from the fossil-fuelled economy of the past to a new low carbon future. Delivering a just transition will mean we leave no-one behind. The Call for Evidence published in December 2022 is important to ensure we base our plans on a robust evidence base.

In order to deliver on our vision for a Fairer, Stronger, Greener Wales this plan details how our Net Zero Skills Action Plan will prioritise **7 key areas of action**:

- **Gain an understanding of the current skills position for each emission sector**
- **Build a shared understanding of net zero skills across Wales**

- **Grow a skilled workforce to meet our net zero commitments**
- **Strengthen the skills system**
- **Promote opportunities for early years and young people to realise their potential**
- **Cross-government and partnership approach to meet our skills commitment**
- **Just transition.**

To enable the level of change required we must **drive a change in behaviour and culture** which makes a meaningful and positive contribution towards our emissions reduction targets.

We want to equip all learners with the right information, options and career pathways. Pathways that encourage and stimulate our current and future workforce and represents the diversity of our communities.

The Plan sets out this Government's commitment to net zero skills. It is clear we do not yet have all the answers and our next steps will be to undertake a public consultation on sector specific skills requirements before publishing a skills roadmap. As we implement the Plan, we will continue to ensure a **partnership approach**, drawing on the strength provided by our social partnership way of working.

I look forward to working with you to deliver our **Net Zero Skills Action Plan to create a Stronger, Fairer, Greener Wales for all.**

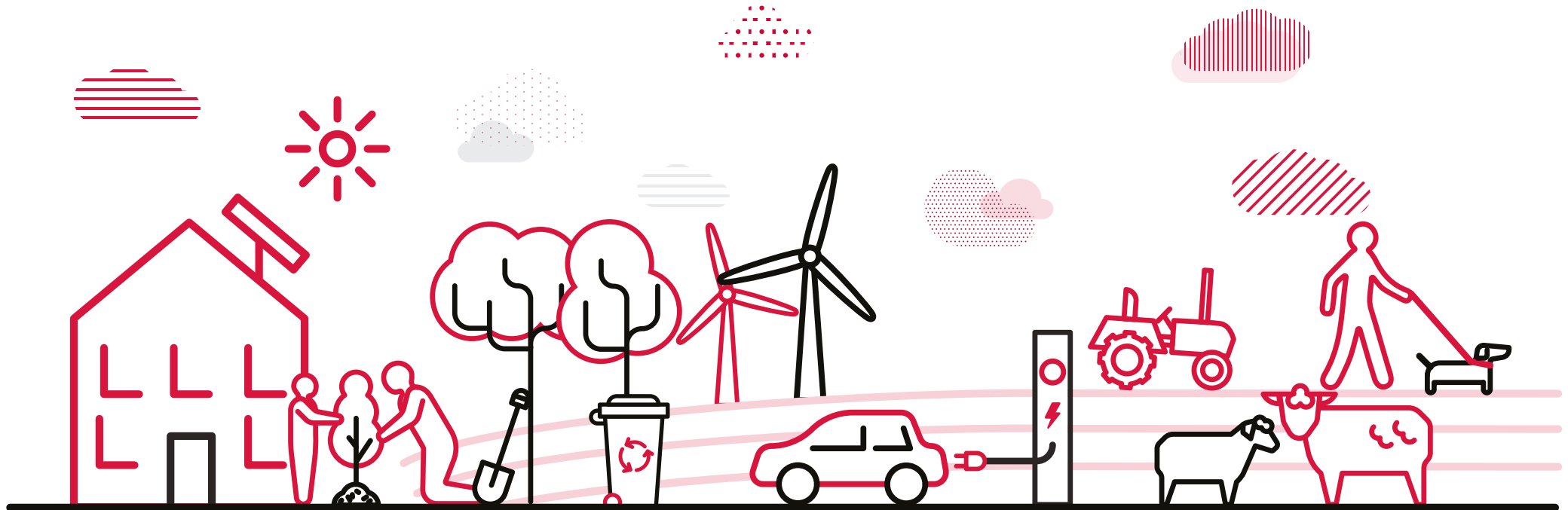
Introduction

The Welsh Government is committed to creating a Wales where individuals of all ages can receive a high quality education, with jobs for all and where businesses can thrive in a net zero economy that champions fairness and equality.

This action plan **sets out the current net zero skills position in Wales, against the backdrop of our 8 emission sectors** set out in Net Zero Wales. It also sets out the changes needed in our skills system and the key actions required to support businesses and learners to achieve a just transition to net zero.

As we commence delivery of the plan, we will build on the extensive engagement undertaken in its development and draw on the strength provided by our social partnership way of working and robust stakeholder knowledge.

There are already good examples of work taking place across Wales to drive forward change to meet our net zero commitment. The plan **celebrates some of these successes to inspire and motivate others** to realise the potential that exists through delivering change and investing in skills.



Our Skills Journey Roadmap

> Research and Engagement

During 2022 we have completed extensive engagement and mapping;



Evidence reports



Economic position



Sectors/
Emissions landscape



Understanding
green/Net Zero skills



Cross government
commitments



Our commitments to a
Stronger, Fairer, Greener Wales

< The Skills Plan

Team Wales approach to delivering skills for Net Zero

(review and accessing existing mechanisms for solutions);



Summarise and
position our **sector**
landscape



Deliver greater
flexibility within
our **skills system**



Supporting actions
to help Wales grow
a **highly skilled**
workforce



Strong and
sustained
stakeholders
and **partnership**
engagement to
meet the challenges



Deliver **coordinated**
policies through
cross government
commitments
that support
Net Zero actions



Creating opportunities
and raising awareness
for **early years** and
young people to help
achieve their potential



Monitor **economic**
impacts and UK
wide approaches



Deliver coordinated
and consistent **information**
on skills and career
opportunities through joint
awareness raising actions
and targeted campaigns

> Actions and Delivery

Short term
(Review and accessing
existing mechanisms
for solutions)



Create the right upskilling opportunities
Clear careers options and awareness raising actions
Green Personal Learning Accounts pilot
Steering/Advisory groups established to direct
plan impact and outputs
Data and labour market intel sharing/monitoring impacts
Continued stakeholder and partnership engagement

Medium term
(Shaping the future skills)



Shaping the future skills needs
Clear skills pathways and progression options
Upskilling choices/embedded skills
Journey to competence
Sector specific solutions
Employer support options and awareness
Early years opportunities
Continued stakeholder and
partnership engagement

Long term
(Sustainability and growth)



Maintained collaboration
Innovative and reactive solutions
Sustainable sectors and jobs
Maintaining a highly skilled workforce
Continued stakeholder and
Partnership engagement

**> Delivering
skills to meet
our Net Zero
commitments**

Just Transition

Achieving a just transition to net zero is essential; we must leave no-one behind as we move to a greener, fairer future.

The change that is needed will impact on industries, sectors of the workforce and socio-economic groups in different ways, depending on the pathways, policies and actions taken.

Our approach consists of two key work packages over the next 12 months, which will shape the future work programme linking to our next Net Zero Wales Plan in 2026.

The first is a set piece **Call for Evidence**¹ to test early thinking, involve stakeholders and understand the impact and opportunities across our decarbonisation pathways to 2050. The Call for Evidence will be used to build the evidence base, inform the activity and work packages in the Framework and engage our key stakeholders in discussions. The Call to Evidence was launched in December 2022.

The second is to develop a **Just Transition framework** which will build our evidence base and research (understanding the impacts and any areas for opportunities to improve equalities); maximise integration across our decision making processes, sectors and plans and embed engagement across the public, businesses and communities. This will commence in 2023.



1. **Just Transition to Net Zero Wales** | [GOV.WALES](https://gov.wales)

The Well-being of Future Generations Act

The Well-being of Future Generations Act provides us with a comprehensive framework to ensure that future generations have at least the same quality of life as we do now, to create a Wales that we all want to live in, now and in the future. This will allow us to both minimise the impacts but crucially maximise the opportunities it provides for Welsh workers and communities. This will support our impact on

improving the lives of the people of Wales by identifying and enabling access to the right skills and qualifications, improving their chances to enter quality employment or enable progression opportunities within employment. In addition this will support the growth of the economy by strengthening net zero skills to enable continued development of a highly skilled workforce.

Stronger, Fairer, Greener Wales: Plan for Employability and Skills

Our *Plan for Employability and Skills*² committed to publish a Net Zero Skills Action Plan setting out how a just transition can help workers and businesses change for a future that is sustainable. The Plan for Employability and Skills recognises that as we emerge from the pandemic and face the headwinds of Brexit and climate change, we need to take action to maximise fairness and eliminate inequality to make the greatest difference to people and communities. The plan prioritises 5 key areas of action:

- Young people realising their potential
- Tackling economic inequality
- Championing Fair Work for all
- Supporting people with a long term health condition to work
- Nurturing a learning for life culture.

Prosperous

An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work.

Resilient

A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change).

Healthier

A society in which people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood.

More Equal

A society that enables people to fulfil their potential no matter what their background or circumstances (including their socio economic background and circumstances).



LLESANT
CENEDLAETHAU'R DYFODOL
WELL-BEING OF
FUTURE GENERATIONS

Globally Responsible

A nation which, when doing anything to improve the economic, social, environmental and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being.

Vibrant Culture and Thriving Welsh Language

A society that promotes and protects culture, heritage and the Welsh language, and which encourages people to participate in the arts, and sports and recreation.

Cohesive Communities

Attractive, viable, safe and well-connected communities.

Areas of Action

Our Approach

The Plan sets out this Government's commitment to net zero skills by investing in people, skills and talent as crucial drivers towards a stronger, fairer, greener economy. The status quo is not sustainable, and the plan is the first step in helping to guide difficult decisions on business investment and planning, with education providers and our public services. It should also help learners of all ages understand how the support they will receive is backed up by a skills systems and economy that is fit for the future. We will continue to ensure a partnership approach as we implement the Plan, drawing on our social partnership way of working.



Sector Landscape

- › Undertake a public consultation on the sector specific skills requirements to inform a Skills Roadmap for each sector
- › Grow and strengthen the right skills sets for each sector
- › Publish Sector Roadmap to support skills development



Understanding Net Zero Skills

- › Building a shared understanding of net zero skills
- › Awareness raising, information and opportunities
- › Sharing knowledge and good practices



Skilled Workforce

- › Developing the Journey to Competence
- › Supporting our employers and our partners
- › Delivering new approaches to growing our skilled workforce



Skills System Opportunities

- › Explore options to strengthen our skills system
- › Clarification on the skills offer
- › Harnessing links with Industry to support knowledge transfer



Young People and Early Years

- › Understanding careers opportunities and options
- › Sharing good practice models for school and employer programmes



Partnership Approach

- › Continue our collaborative approach with our partners and stakeholders
- › Establish new dynamic working groups to deliver and embed change



Just Transition Approach

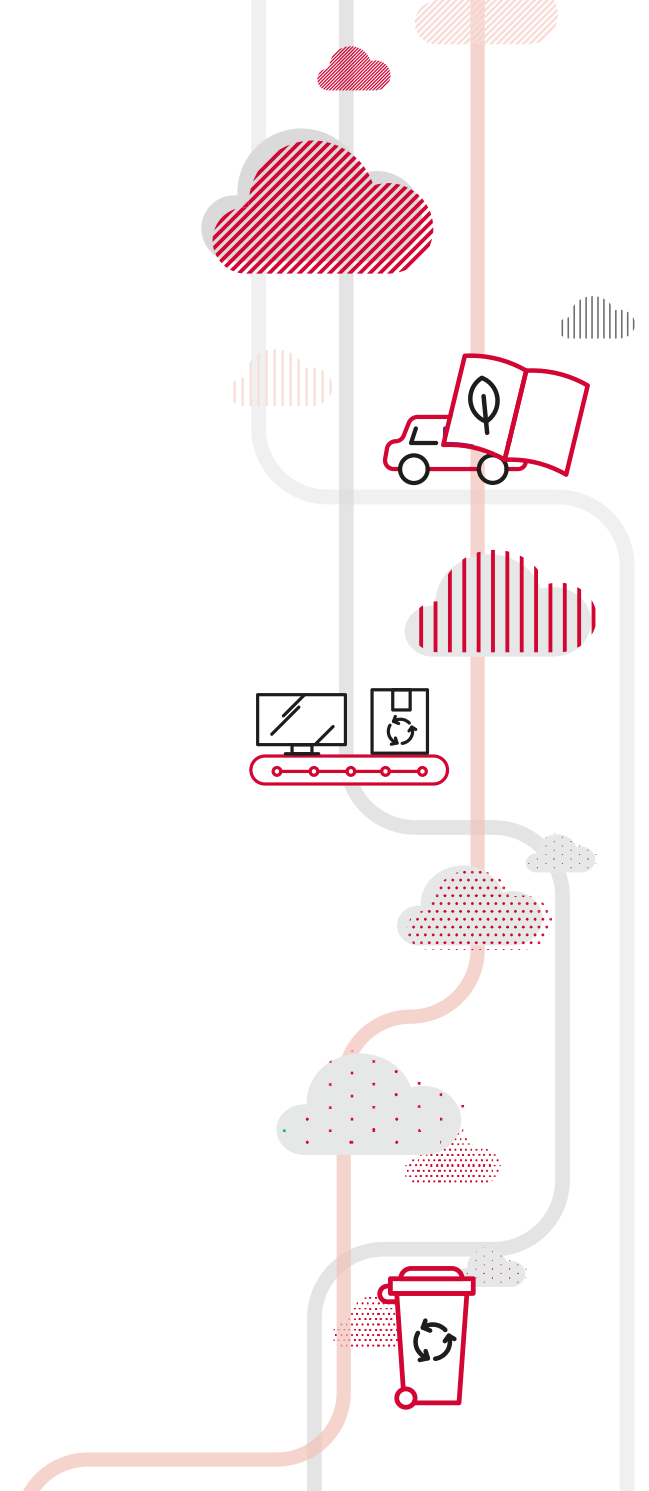
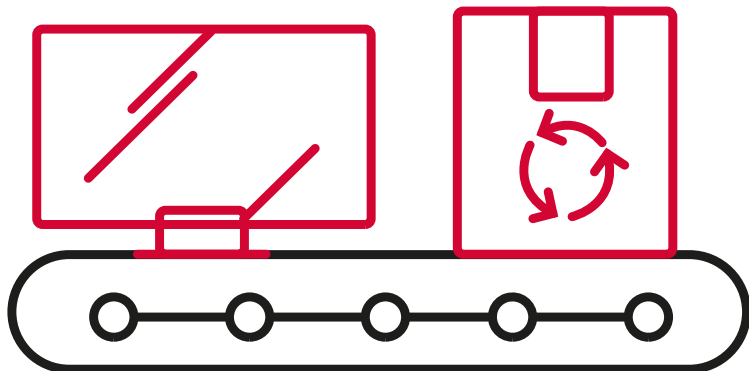
- › Driving forward positive actions to ensure no-one is left behind
- › Learn and adapt to new approaches based on evidence and research
- › Embed cross-cutting themes throughout the Plan's delivery

What's Next

The plan details **36 actions** that we will take forward as part of the implementation stage of the plan. We have already commenced work on many of the actions, which is largely in part thanks to the support and engagement shown by our stakeholders and cross-government way of working.

Actions have been set out in 3 categories:

- > **Short Term** – under 1 Year
- > **Medium Term** – 1–2 Years
- > **Long Term** – over 3 years.



Economic context

Over recent years the economy in Wales, as in the wider UK, has experienced an unusually turbulent period. This turbulence has largely reflected non-economic factors: the UK leaving the European Union, the pandemic, and latterly the war in Ukraine.

Periods of heightened economic uncertainty and turbulence pass, but underlying trends in the economy persist, gradually transforming the economic context within which policy must be made. These underlying trends are themselves often driven by non-economic factors: demographic change, technological development, shifts in consumer tastes, and changes in the pattern of competition from other countries and regions. Climate change can be considered a key non-economic factor that will have a key impact on future economic trends.

Economic change driven by our net zero transition will take place in the context of continuing “churn”, with some businesses being created, some expanding, and others contracting or ceasing to exist. In part, these changes reflect the underlying trends and in part they reflect the dynamic process of competition where more productive businesses replace less productive ones.

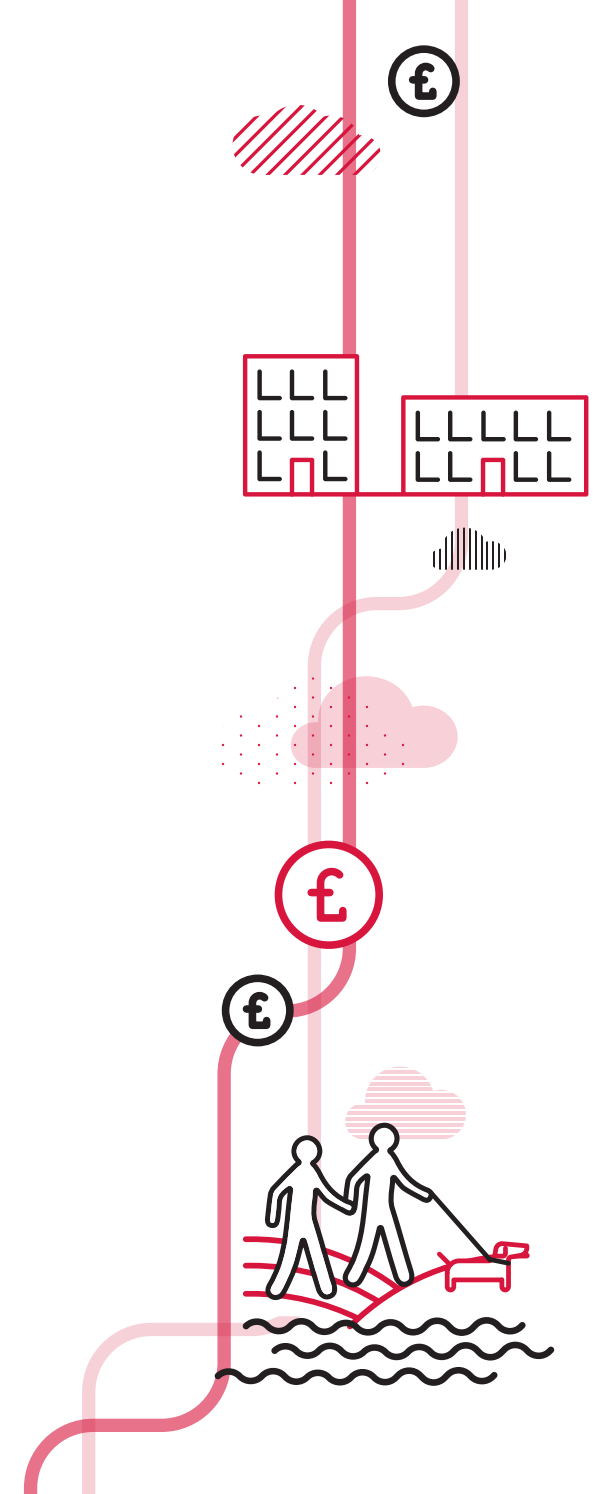
Policies to secure the decarbonisation of the economy, and to achieve other environmental goals such as promoting biodiversity, will be one of the factors driving both the creation of new jobs and the change in the skill requirements of existing jobs, over the coming decades.

The number of jobs in sectors that are incompatible with decarbonisation and delivering net zero (for example large scale oil refining) is relatively small. Similarly, research from the International Monetary Fund (IMF) and others, has suggested that the number of new jobs to be created in replacement activities (such as low carbon energy generation) is likely to be modest in the context of the ongoing “churn” described above.

However, it appears likely that changes in the skills needed to support decarbonisation will impact far more jobs in the future. The extent of these changes will vary in both their scale and nature.

A key challenge is the level of uncertainty about the technologies that will deliver net zero across the economy. For example, the route to the full decarbonisation of heavy vehicles, and of building heating, is currently unclear. For this reason, a focus on shorter term needs (for example, energy efficiency) is appropriate, particularly where these needs that will not be addressed by the normal training practices of business.

There is a need to grow net zero skills in Wales to help meet the skills challenges now and in the future as well as developing a better understanding of the impacts of change, and how to make sure these are fairly distributed in society. This will need to take place during this period of considerable economic uncertainty.





Sector landscape

What are we trying to achieve?

To gain an understanding of the current skills position for each emission sector in Wales, what skills are needed in the short, medium and long term and how we will achieve this.

What is the Challenge?

The direction of travel to meet the net zero skills commitments is further ahead in some emission sectors than others. In some sectors there is confusion amongst employees, industry, businesses and stakeholders on the direction of travel and how these changes could impact on the skills of their workforce or an individual's career pathway. There is currently limited detailed information on the overall economy wide skills landscape (including qualifications requirements) across Wales.

Most reports published by industry have identified skills gaps across all sectors and emphasised the importance of identifying and filling them. In many

cases, they do not provide sufficient detail on the skills or qualifications needed. Skills requirements will continue to evolve as decarbonisation accelerates and there is a need to understand what these skills needs are and how we can fully utilise transferable skills to allow the skills system to respond and deliver effectively.

Current position

There is good work evident across all sectors in Wales to increase skills levels to support the transition to net zero commitments. This includes industry leading from the front to assess the challenges and determine how the changes will affect skills needs now and in the future. Some sector skills focused groups have been established, for example on the Optimised Retrofit Programme and Net Zero Wales: Skills Economies Advisory Forum (NOW SEAF) within the Energy Sector, that considers green and net zero skills needs and the impact of these skills requirements on sectors.

To inform the Plan, research was commissioned from the Wales Centre for Public Policy (WCPP). The report – *Net zero skills: Insights and evidence from emissions sectors in Wales*³ sets out the current net zero skills position across Wales, the future skills needs and gaps to meet the changing demands on the workforce for the the transition to net zero

The WCPP Report's findings have informed the high level summary of the skills needs for each of the 8 emission sectors. A more granular sector analysis will be undertaken as part of a public consultation later this year, this will inform sector specific skills roadmaps.

Actions

No.	Action	Timescale
1.	Undertake a public consultation on the sector specific skills requirements. This will set out the detailed skills position for each sector in Wales, what skills are needed in the short, medium and long term and how to achieve this through continued partnership working. The outcome of the consultation will support the development of a skills roadmap.	Short term – Spring 2023.

3. <https://www.wcpp.org.uk/publication/net-zero-skills-insights-and-evidence-from-emissions-sectors-in-wales>

Case Study: Apleona

Apleona UK, part of the global Apleona Group, provides integrated facilities management. It is experienced in providing services for both private and public sector organisations.

Apleona works closely with clients to lower energy consumption and reduce carbon footprints. It also **prioritises waste management** and ensures any waste is minimised and well segregated, diverting as much as possible away from incineration and landfill. Apleona's commitment to sustainability sits in tandem with that of its client which has

committed to 100% recyclable packaging. Once purchased and used, the client's key products can be returned to the site and reused. It's a great example of how Wales will transition to a circular economy

Apleona's focus on waste management is having a significant impact on jobs and skills. Waste management is fast becoming a more skilled role. Through the **Welsh Government's apprenticeship scheme**, Apleona currently has a number of apprentices based at Magor and is looking to take on

another three imminently. They specialise in Sustainable Resource Management and receive training in waste legislation.

Meanwhile, Apleona believes that computer systems will in the future help predict trends in waste and that will also require training and upskilling.



Case Study: AMRC

At the very heart of AMRC Cymru's approach is the sharing of learning and skills with Wales' manufacturing community. Their aim: to equip companies with the digital skills and knowledge in the best use of data to make widespread improvements.

AMRC Cymru is a world-leading research and development centre based in North Wales. Funded by Welsh Government and operated by the University of Sheffield's renowned

Advanced Manufacturing Research Centre, the £20m state-of-the-art centre is in Broughton. One of its goals is to help Wales' manufacturing community adopt new technologies to drive improvements in productivity, performance and quality. In addition to the focus on making products more efficiently and cost effectively, AMRC Cymru is gearing up to work with companies to help them become more sustainable. For example, by installing

digital tools on the factory floor, allows them to gather and analyses data that can general improvements to practices. The very heart of their approach is sharing of learning and skills with Wales' manufacturing community no matter the size and scale of the organisation.



“Whatever the firm and whatever their size, our aim is the same. We want to equip a company with digital skills, the knowledge of how to use data and how to make improvements”.

“But we need to attract more young people to become engineers. We are looking for people with the skillsets of data analysts or software developers. But yes, if you want to save the planet, become an engineer.”



Understanding Net Zero Skills

What are we trying to achieve?

To build a shared understanding of net zero skills, create opportunities for businesses, industry, stakeholders and government to grow net zero skills, by promoting a positive culture.

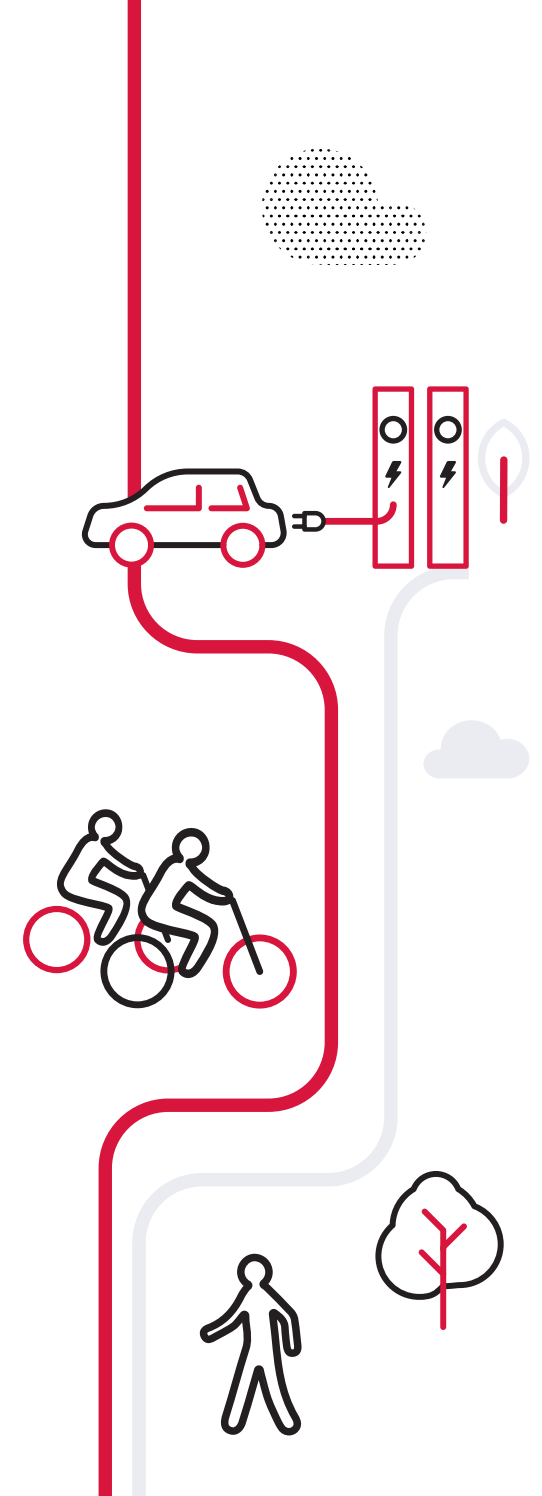
What is the challenge?

Our engagement with stakeholders has suggested there is a level of confusion and a lack of understanding amongst businesses, employees and school leavers about what is meant by green/net zero jobs and the skills required.



Current position

We have, to date, interpreted net zero skills broadly as the skills needed to support each sector on their path to net zero across the whole economy. As a result, all jobs have the potential to make a contribution. There is a need to narrow the definition and gain a common understanding of the jobs and skills that will be required, with a clear flow of information between government, private sector and employees on the skills needed.



Actions

No.	Action	Timescale
2	Develop a shared understanding of what net zero skills are and provide advice and guidance to our stakeholders to enable them to develop policies, communications, Labour Market Intelligence and ensure consistent messaging. The Office for National Statistics (ONS) undertook a consultation on defining a net zero job. The ONS is publishing the definition by the end of the financial year 2022/23, which will inform the definition for Wales and support how the Welsh Government will measure the impact of this Plan.	<i>Short term</i>
3	Build upon existing research, statistics, surveys and identify gaps and trends in representation to develop Labour Market Intelligence for net zero skills. Explore options to share Labour Market Intelligence with key stakeholders, delivery organisations, trade bodies, training providers, schools and employers to support the actions that build a shared understanding of the immediate and future skills requirements.	<i>Short to medium term</i>
4	Work with Regional Skills Partnerships to implement the actions and recommendations within their Employment and Skills Plan 2022–25.	<i>Short to medium term</i>
5	Work with key partners to explore the best platform to share knowledge, sign posting opportunities, information and bring together the offer of net zero skills and jobs in Wales to support industry, employers and learners. This will include: <ul style="list-style-type: none"> • defining net zero skills • sectors and their ambitions to achieve net zero • qualifications and training courses • jobs and career opportunities • career options and journey to competence • regional support • skills package of support • net zero skills network to enable everyone to be part of the conversation and have their views heard. 	<i>Short term</i>
6	Share good practices and celebrate success from employers, learners and our delivery partners by developing case studies across all sectors to support other employers or learning organisations to gain net zero skills.	<i>Ongoing</i>
7	Support the Call for Evidence, delivered as part of our Net Zero Team Wales approach (published in December 2022), which aims to further understand the impacts and opportunities across our decarbonisation pathways to 2050. The outcome of which will build further evidence and inform the future development of net zero skills with our key stakeholders.	<i>Short term</i>

Case Study: RWE

RWE is Wales' largest power producer and generator of renewable energy, creating enough electricity to power over four million homes – around three times the total number in Wales.

Coleg Llandrillo is a crucial partner, running **RWE's offshore training programme** which

has already provided earn-as-you-learn opportunities for more than 40 apprentices.

The Coleg Llandrillo partnership will undoubtedly develop further with work already starting on a £14m state-of-the-art Centre of Excellence for Engineering at Rhos-on-Sea which will feature a bespoke wind turbine centre.

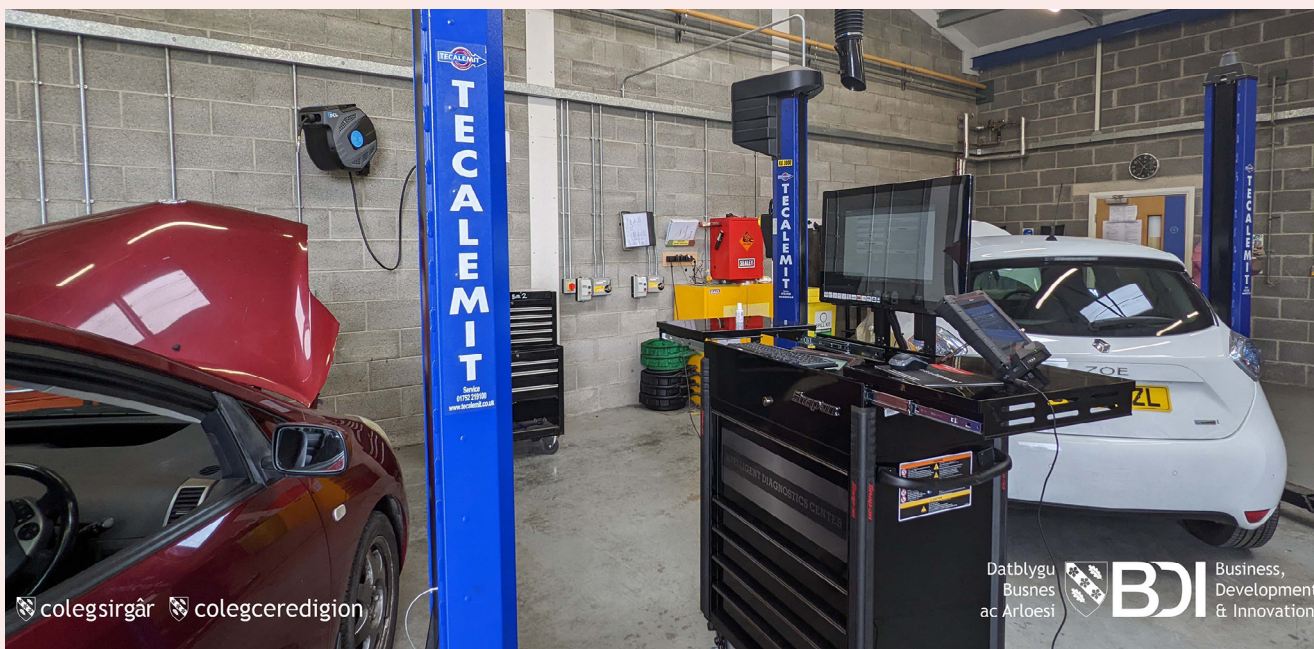
The college is also working with RWE to **address the skills shortage in offshore wind and the energy sector** by delivering higher education to technicians via distant learning. It will see those in midlife returning to college to learn new skills, gaining HNC and HND qualifications, which will be vital for a greener Wales.



Case Study: Green Skills Academy

Coleg Sir Gâr and Coleg Ceredigion are helping to future-proof our workforce by providing skills that are contributing to a greener, cleaner Wales through their Green Skills Academy that was established in 2021. The college has already trained over 550 people in practical

skills such as **installing solar pv, heat pumps, solar thermal hot water and electrical vehicle charging points**. And now it has launched an Introduction to Retrofit course to help “demystify” retrofit for the construction industry.



The courses are a great example of the upskilling support being provided via the **Welsh Government’s Personal Learning Accounts programme (PLAs)**. This has been strengthened with an additional investment of £2m this year into “Green PLAs” which specifically aims to support Wales’ transition to net zero. With the removal of the eligibility salary cap and introduction of an expert advisory panel to approve the courses, the investment aims to target a more broader cohort in the sectors of construction, engineering and manufacturing.

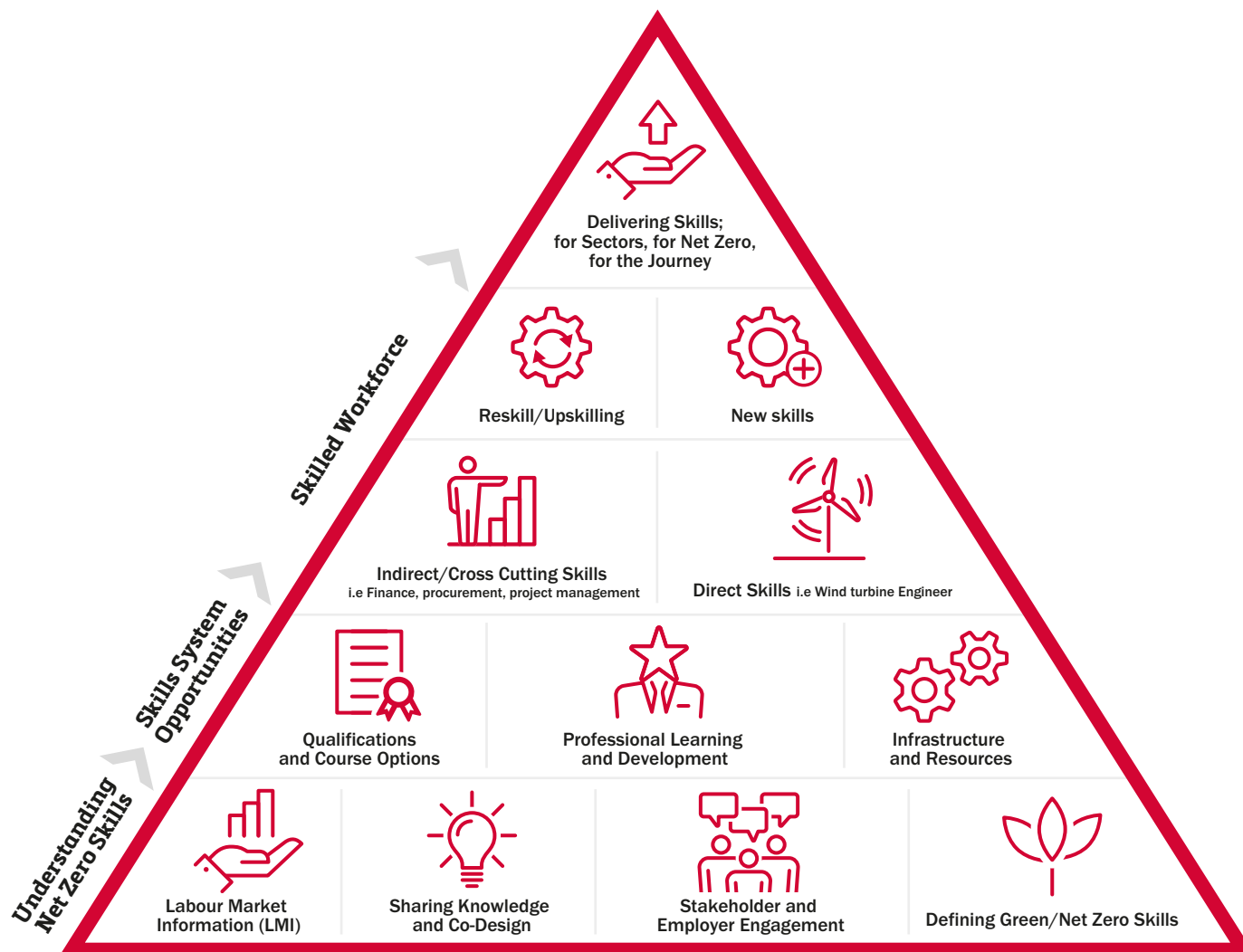
Next on the agenda for Coleg Sir Gâr and Coleg Ceredigion is the development of training to help the general population understand their properties:

“Many people still don’t realise that this sort of training is available at their local college –across a wide geographic area and delivered with our industry partners. We are here and we can help.”

Jemma Parsons, PLA Project Manager.

Net Zero Skills Building Blocks

Many elements need to come together to help us understand and then shape skills needs.
Helping us to build the Skilled Workforce for the Future.





Skilled workforce

What are we trying to achieve

To support and grow a skilled and diverse workforce and create quality jobs to meet our net zero commitments in a rapidly changing economy.

What is the challenge?

Feedback from stakeholders suggests there has been a decrease in investment in training for employees as a result of the current economic challenges. Pre-pandemic, evidence from the Employer Skills Survey 2019 showed employer investment in training in Wales had declined relative to previous years. **Some employers are not aware of the positive impact of qualifications and skills in supporting their transition to net zero and how this can benefit their business.**

At present **there is no detailed understanding of what the skills and qualifications journey is for each occupation within each sector**, to grow a skilled workforce to meet our net zero commitments.

Individuals may not have sufficient knowledge or understanding of the types of quality job opportunities associated with net zero skills and their earning potential. Therefore, these individuals may not be assessing these opportunities, which has exacerbated the skills shortage in these sectors.

We know there is a **strong need to diversify the workforce and address perceived occupational stereotypes**. There are also challenges linked to understanding the barriers to engagement from the early years through to training, entering or accessing employment.

Current position

A skilled and educated workforce will help Wales attract high value, innovative and knowledge-based businesses and adapt more readily to achieve the transition to net zero in a rapidly changing economy.

At the heart of everything we do is the need to ensure individuals gain the skills, knowledge and qualifications they need to flourish and to progress seamlessly along the range of qualification levels. We need to ensure support is available to those displaced and that individuals' transferrable skills are harnessed with options to upskill or gain wider qualifications in existing or emerging industries. There is a need to empower individuals to take responsibility for their learning and career progression, whether this is transitioning between job roles or progressing in their chosen occupation.



Many businesses are taking proactive steps towards improving their sustainability, demonstrating a positive impact on the people and places around them. This is a growing community of forward-thinking organisations who are helping Wales transition to net zero. **To encourage more businesses to take action a better understanding of the skills requirements per occupation for new and transitioning jobs is needed.**

We want businesses to grow their skills base to enable them to reach future markets and respond to a fast changing economy. Businesses must recognise the benefits of operating in an ethical and more sustainable way. This will help businesses to:

- reduce energy costs and save money in the long-term
- increase chances of winning new business
- innovate products and services
- increase likelihood of securing investment and new contracts
- become more efficient and improve businesses resilience
- improve brand image and build customers' trust and loyalty
- set best practice for others to follow
- meet standards and regulations
- develop a more diverse workforce.



Actions

No.	Action	Timescale
8	Develop a roadmap setting out the current detailed skills position for each sector in Wales, what skills are needed in the short and longer term and how this will be achieved through continued partnership working. This will include dependencies between sectors and their supply chains.	<i>Medium term</i>
9	<p>Develop a Journey to Competence (progression pathways to demonstrate career options) for each occupation and for new and transitioning jobs in each sector, working with industry and partner organisations. The pathways will outline what qualifications are needed throughout the progression journey to become competent in an occupation, for example a plumber or electrician. This will include entry level requirements, short and longer qualifications and courses.</p> <p>The Journey to Competence will ensure the right qualifications are delivered to meet industry needs. It will help provide clear options to enable individuals to make an informed career choice for net zero occupations, which could also support addressing stereotypes. We will work with Careers Wales and Working Wales, Qualifications Wales and National Occupational Standards to take this forward.</p>	<i>Short to medium term</i>
10	<p>Work with employers and their representative bodies by helping them understand the benefits and impact of net zero qualifications and skills on their business by:</p> <ul style="list-style-type: none"> • providing clear information on our skills package and support options to upskill or reskill individuals ensuring they access the right opportunities or provision to successfully aid their career path • exploring options to develop an employer mentoring programme for employers to advise and support other employers on net zero skills to help grow and change their business • understanding the barriers employers face and actions that could be developed to enable them to release staff to undertake the training. 	<i>Short to medium term</i>
11	Work with Business Wales to inform their enhanced information, guidance and support that helps businesses reduce their carbon emissions and adapt to the impacts of climate change.	<i>Short term</i>
12	Deliver the £2m green Personal Learning Account pilot that has been established over a 2-year period to support individuals to either upskill or re-skill in sectors demanding high levels of net zero skills. The pilot will target training and qualifications to support the development of a skilled workforce and the transition to net zero. It will also promote women to take up net zero skills in the agreed sectors. Delivered through our college network the sectors supported are construction, energy, engineering and manufacturing.	<i>Short to medium term</i>
13	Continue to engage with the Wales TUC and their newly appointed green representatives and learning representatives on the development of net zero skills. Trade Unions play an important role in supporting employers to achieve our net zero commitments and support and grow skills in the workforce.	<i>Ongoing</i>
14	Look for opportunities where net zero skills will support the Innovation agenda and the climate and nature mission. Innovation is crucial to ensure we maximise our investment across Wales and deliver the fundamental changes needed for our workforce to meet our net zero commitment.	<i>Medium to long term</i>
15	Continue to learn from outside Wales and bring good practice back into Wales' workforce, careers and education. Skills Competitions provides us with a benchmarking tool against which we can base our improvements and enables us to absorb new techniques and industry practice rapidly, supporting the growth of a highly skilled workforce.	<i>Ongoing</i>

Case Study: Robert Price

A fantastic example of how industry is taking on the challenge to upskill individuals by linking to existing training programmes can be seen at Robert Price Builders Merchants in South East Wales. Across its network of branches the company is actively linking its awareness raising programme in new and emerging technologies to Personal Learning Account courses delivered by the Further Education

college network. Robert Price has created the **Sustainable Energy Centre**. It is designed to showcase and educate customers on a wide range of innovative, sustainable products including air and ground source heat pumps, solar pv, electric vehicle charging points, battery storage, internal and external wall insulation and even insulation paint.



Personal Learning Accounts offer flexible courses and qualifications so that people can train around existing responsibilities which has been highlighted as a real challenge for existing contractors in this sector.

Case Study: ECA

ECA is the UK's largest trade association representing electrical, electrotechnical and other engineering contractors across the UK. It provides advice, industry representation and helps shape qualifications and training to its 215 member firms across Wales. Most are predominantly SMEs.

In 2022, it launched **Leading the Charge** – a suite of videos, podcasts and articles which shine a light on the industry in the face of mass electrification.

“We wanted to raise awareness among young people, employers and decision makers of the full extent of the sector’s role in net zero but also of the huge opportunities that exist.”, Andrew Eldred, Director of Workforce and Public Affairs.

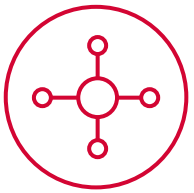
In recent years, with the rise of solar PV, electric vehicle charging points and battery installation, the demand for electricians has soared. Supporting this demand are the new vocational qualifications and apprenticeship framework now available in Wales, of which Andrew is a strong supporter:

“The system that Qualifications Wales has put in place effectively means there are now multiple, potential entry points into the apprenticeship. It’s really joined-up and will help attract new entrants into the industry.”

Chris Jenkins is director of EFT Consult, who feature in the **Leading the Charge Campaign**, is a firm believer in the need to invest in training:

“Any companies that are considering investing in training and technology, I’d say go for it. Net zero and the demand for electrification is not something that’s going to go away. It’s only going to grow. Make the commitment and I believe it’ll pay off.”





Skills System Opportunities

What are we trying to Achieve?

To strengthen the skills system to become more flexible, responsive and agile to deliver the right skills and qualifications to meet the rapidly growing net zero skills demand from across all sectors and individual needs.

What is the Challenge?

Despite the confusion in some sectors there is already a rapidly growing demand from businesses for more people to have net zero skills to take forward jobs across all sectors in Wales. This growing demand for new skills and a change in skills needs has resulted in the skills system needing to become more flexible, responsive and agile, ensuring the right qualifications are delivered to meet employers, individuals and the economy's needs. There are many challenges that colleges and learning providers face, including:

- › rapid changes in technologies and uncertainty about the technologies that will deliver net zero across the economy – therefore there could be reluctant to upskill employees
- › facilities/estate to deliver courses
- › uncertainty with some sectors on their future requirements
- › learners may not have a full understanding of their career choices

- › disaggregated Labour Market Intelligence may not be known
- › lack of demand from learners
- › tutors may not have the right knowledge or experience to deliver the required qualifications
- › learners not wanting full qualifications, just elements to meet their needs
- › flexibility of existing learning provision to meet learners or employers needs
- › timescales of developing new qualifications to meet the rapid changing economy needs.

Businesses and workers need help in understanding what skills are required and the options available in the current skills offer to enable them to make choices that are sustainable. The existing system could appear complex to employers and learners because of the number of courses and qualifications that are on offer across Wales. Everyone's pathway is different depending on their personal or career circumstance, but the system needs to be easy to navigate. Collaboration between Further Education, Higher Education, learning provision and industry is key to ensure the right offer and progression for learners is offered in a more coordinated way.



What is the current position?

There are already significant good practices across the sectors working with Further Education, Higher Education and Industry, which have successfully delivered net zero skills and increased capabilities in Wales. We will learn from these and share these successes across our learning networks in Wales. This will build a strong and co-ordinated network of net zero skills across our skills system.

Post-16 Reforms

One of the principles underlying the reforms to post-16 education through the Tertiary Education and Research Act is that at a system-wide level, we can do more to meet the needs of learners by providers operating within a coherent, complementary ecosystem. Achieving a collaborative sector is one of the goals and duties of the new Commission for Tertiary Education and Research (CTER). It will provide strategic leadership for different providers of tertiary education to ensure that it meets the needs of learners, the workforce and employers and better meets the strategic aims of government and improves individual and national outcomes.

Apprenticeships

Apprenticeships are helping to futureproof, motivate and diversify the workforce – offering people the chance to gain high-quality vocational skills through assessable and quality opportunities. They are crucial to our ambitious vision for a Wales where no one is held back. Success is not solely defined in terms of increased numbers – we are committed to making further improvements to our programme. Responding to the skills shortages and gaps in priority sectors will be critical to drive productivity and economic growth, whilst maintaining our net zero ambitions.

Qualification Development

The need to access qualifications in Wales that respond to industry needs has emerged strongly in our stakeholder discussions. A package of work is currently in place to reform our post-16 curriculum. This includes:

- **Prioritising net zero skills through the National Occupational Standards (NOS) –** NOS sets out the knowledge, skills and competencies required for an occupation. They underpin a range of apprenticeship qualifications and adult vocational qualifications across the UK and overseas. The UK wide NOS Strategy for 2022 was published in September 2022 and acknowledges significant changes in the operational context of many roles, an increased emphasis and valued place for transferable skills and labour mobility with the aim to make NOS processes and systems more agile and accessible. The strategy makes a commitment to strengthen the link between the UK labour market and skills needs of employers, measured by a range of success indicators.
- **Review of Vocational Qualifications in Wales –** Our Programme for Government and the Co-operation Agreement with Plaid Cymru sets out our shared commitment to significantly expand the range of made for Wales vocational qualifications to fit the needs of learners and the economy. The Review will consider the current offer of vocational qualifications in Wales and use the findings to bring forward reforms.

➤ Qualifications Wales Sector Review –

Qualification Wales has undertaken a comprehensive programme of review and reform of vocational qualifications, including a series of sector reviews of qualifications. Four sector reviews have been completed, which have led to the commissioning of new qualifications for Wales. These qualifications have included content relating to environmental sustainability, where relevant and appropriate.

Professional Development

We must ensure we provide opportunities to ensure tutors have access to the right level of skills to deliver the qualifications or courses required by industry. Continuing Professional Development is vital to ensure lecturers and assessors have access to the right support to refresh and renew their sector focussed skills through a network of industry engagement. The Knowledge Transfer scheme pilot is a new concept aimed at colleges and independent Work Based Learning providers in Wales to help them fund the delivery of master classes or research projects. It is designed to accelerate and build expertise for staff and increase the learner's knowledge and learning experience in subjects such as digital, green skills, retro fit construction and engineering. The aim of knowledge transfer is to bring in industry expertise with the express purpose of delivering new content and concepts as opposed to teaching the current curriculum.

Current Post-16 Skills System

Wales has a strong and broad post-16 skills system that we continually need to refine.

The current skills system in Wales for Post-16 year olds consists of:

- **Higher Education –**
In 2019/20 Wales' 9 universities supported over 134,000 students with 87% of graduates moving into employment or further training within 15 months of graduating.
- **Further Education –**
Our Further Education college network in Wales offer both full and part time courses to anyone over 16, in a wide range of subject areas including Apprenticeship options. They support the skills pipeline for much of Wales, delivered across 15 main campuses with off-site and specialised training facilities supporting the current and emerging skills needs. They also work with industry to tailor provision to the needs of industry.
- **Apprenticeships –**
Apprenticeships offer a cost-efficient way to create a more flexible workforce, helping to support current and future skills needs. We have a highly successful Apprenticeship programme in Wales, built in partnership with Welsh businesses. The Apprenticeship programme in Wales supports businesses of all sizes. Delivering across 23 sectors with up to 100 pathways, where individuals can achieve qualifications ranging from Level 2 (GCSE equivalent) to Level 5 (HNC/HND equivalent). Degree level apprenticeships are available in Digital and Engineering and advanced Manufacturing sectors.
- **Personal Learning Accounts (PLAs) –**
Our PLA Programme is designed to help individuals earn higher salaries and assist businesses to prepare for future skills and qualifications needs by supporting upskilling. Delivered via our network of Further Education colleges across Wales they are a fully funded, fully flexible training offer.
- **Employability Programmes –**
Deliver a comprehensive package of support and guidance for all, particularly those furthest from the labour market. Helping to navigate and respond to any work-related challenges, through training, upskilling, or changing career options.
- **Adult and community learning (ACL) –**
Adult Learning supports the development of skills, improves health and well-being and is a catalyst for social engagement and integration. ACL offers learners opportunities to acquire knowledge and skills through a diverse range of courses including both accredited and non-accredited learning.

Actions

No.	Action	Timescale
16	<p>Explore options to strengthen our skills system and make it more flexible, responsive and stronger. Create greater alignment between Higher Education, Further Education, Apprenticeships and the employability programmes to meet industry needs as they transition to net zero, including:</p> <ul style="list-style-type: none"> a) Review the content of apprenticeship frameworks and pathways with a focus on developing and adapting those apprenticeships supporting our net zero and sustainability goals. Commissioned industry experts will advise on enhancing our current apprenticeships to ensure that they meet the needs of the employers within the growing green economy; and creating new apprenticeships to reflect future occupations. b) Work with the employability programmes to ensure investment in net zero qualifications and skills meet industry requirements. c) Work with Further Education and industry to explore options to develop and embed entry requirements for net zero short courses/qualifications. This will achieve the right level of competency standards for new and emerging skills to directly meet industry need. d) Seek opportunities to work with Further Education and Higher Education to explore regional skills academies/centres for excellence within sectors. e) Build on mapping provision to identify the net zero skills offer across Wales in all key sectors, including Further Education, Higher Education, Employability, Apprenticeships, local authorities and key delivery partners. f) Stimulate demand within schools and colleges for provision/qualifications to ensure the engagement of learners to take up these opportunities is maximised and occupational stereotypes are challenged to enable a skilled diverse workforce for the future. g) Review and evaluate the initial delivery of the eModule to Level 3 vocational learners in Further Education colleges to enable appropriate adjustments to the content for rollout in September 2023. 	<p><i>Short to long term</i></p> <p><i>Short to medium term</i></p> <p><i>Ongoing</i></p> <p><i>Short to medium term</i></p> <p><i>Medium to long term</i></p> <p><i>Short term</i></p> <p><i>Ongoing</i></p> <p><i>Short term</i></p>
17	Ensure the outcomes and evidence of the Plan will feed into the Vocational Qualifications Review, which has been established to reform qualifications and expand the range of 'Made for Wales' vocational qualifications and the Qualifications Wales Sector Reviews.	<i>Short to medium term</i>
18	Continue to strengthen the linkages between the National Occupational Standards, Qualifications Wales and our skills system, building on the recommendations of the NOS strategy for 2022 and beyond.	<i>Ongoing</i>
19	Ensure that any learning from the Knowledge Transfer Scheme is shared and its impact evaluated. It is important that any masterclass, research project or any other format of learning undertaken as a result of the Knowledge Transfer funding will lead to the development of new pathways and programmes at a higher level.	<i>Short term</i>

Case Study: Melin Homes

Having set a target of becoming Net Zero by 2030, Melin Homes is currently trialling new technologies to help decarbonise its 4,000 homes. This **includes piloting an infrared wallpaper called NexGen, exploring hydrogen heating and insulation paint.** It is also installing solar panels and changing its fleet of vehicles to electric.

Melin Homes is a registered social landlord, providing more than 4,000 affordable homes across south-east Wales. The company's vision is to provide site-ready workers that have the confidence and experience to meet the

future needs of the construction industry. Since 2012 it has seen the benefits of investing in training through the creation of its innovative, construction-based apprenticeship scheme; Y Prentis.

To date they have trained more than 500 apprentices. **The current focus of the scheme is on boosting green workforce skills such as the installation of technological solutions that reduce carbon in new buildings and the retrofitting of existing buildings so they are more energy efficient.** The apprenticeship now includes the new suite of

made-for-Wales qualifications in construction and building services allowing the learner to gain an understanding on new technologies and techniques that help tackle climate change and reduce carbon emissions as well as strengthen craft skills to futureproof their abilities.

Melin Homes is also doing its bit by **expanding its fleet of electric vehicles.** Its offices are solar-powered and the team is on hand to advise residents so they can conserve energy within their homes.



Case Study: New Environmental Qualification

As Wales undergoes significant changes to achieve net zero, it is clear that education and upskilling will play a critical role. With that aim, ACT, Educ8 Training and Agored have partnered to develop a new qualification, which they believe will play an important role in Wales' ability to achieve its ambitions.

Currently in development is a new **Environmental Management level 3 qualification which will sit within a level 3 Energy and Carbon Management apprenticeship**. Introducing this type of apprenticeship means that people can gain

vital new skills to help achieve a greener, cleaner Wales while undertaking a paid role and ACT and Educ8 are well positioned to deliver the qualification. They both provide work-based training through apprenticeships for anyone over the age of 16.

The new qualification is designed to be **applicable to businesses of all sizes** and aims to help equip them with the skills to manage their own carbon footprints by including content in the management of environmental, energy and carbon impact.

“Net zero training often gets associated with hybrid technology and engineering but that’s just part of how Wales will achieve its ambition. It will be crucial that every organisation is able to effectively manage their own carbon footprint” –

Matthew Burnett is ACT's Head of Operations and Contracts.

The new qualification is hoped to be available for delivery during 2023.



Net Zero Skills Package

> Labour Market Intelligence

What informs skills development

Inform sector developments – skills, business support and R&D

Shared understanding of skill needs

Future and current jobs planning/International best practise

Inform career choices

> Skills and Training Provision

Strengthen post-16 green skills provision

Qualifications

Career progression

Career pathways

Short sharp courses

National Occupational Standards

Course Choices

Creative/Collaborative solutions

Apprenticeships

> Good Quality Advice and Guidance

Options to help make an informed choice



Individuals

Access careers advice and support to enter provision/learning



Employers

Access advice on workforce development/skills needs through Business Wales



Partnerships

Social Partners and Unions advice and support

> Skills and Training Programmes in Wales

Delivering a Highly Skilled Workforce

Individuals



Unemployed

Young Person's Guarantee (YPG)

ReAct+ –Redundancy/18–24/NEET

Apprenticeships

Communities for Work+

Jobs Growth Wales (JGW+) – (16–18)

Adult Community Learning

Further Education

Higher Education

Employed

Personal Learning Accounts (PLA)

ReAct+ under notice of redundancy

Wales Union Learning Fund (WULF)

Apprenticeships

Adult Community Learning

Further Education

Higher Education

Employers



Flexible Skills Programme

ReAct+ – Training Grants and Wage Subsidy

Apprenticeships

Wales Union Learning Fund (WULF)

BOSS/Business Wales support

Jobs Growth Wales+ (16–18 wage subsidy)

Employer funded – bespoke training



Young People and Early Years

What are we trying to achieve?

To promote opportunities for children and young people to understand the world of work and develop net zero skills. Creating our workforce of the future and realising their potential.

What are the challenges

Children and young people are increasingly aware of the challenges and risks presented by the climate and nature crisis and want to make a positive contribution. To ensure Wales has a skilled workforce for the future, we must motivate and engage young people on career opportunities and the world of work so they can understand and access job opportunities.

Current Position

The Curriculum for Wales commenced its roll out in schools across Wales in 2022. The four purposes are the starting point and aspiration for schools' curriculum design. Ultimately, the aim of a school's curriculum is to support its learners to become:

1. Ambitious, capable learners, ready to learn throughout their lives
2. Enterprising, creative contributors, ready to play a full part in life and work
3. Ethical, informed citizens of Wales and the world
4. Healthy, confident individuals, ready to lead fulfilling lives as valued members of society.

Careers and Work-Related Experiences are a mandatory part of the 3–16 curriculum, gaining and understanding net zero skills is an important element of this. In fulfilling the four purposes, we set high expectations for all, promote individual and national well-being, tackle ignorance and misinformation, and encourage critical and civic engagement.

There are some excellent pockets of collaborative working between employers and schools and through existing projects, where young people develop their knowledge and gain net zero skills in innovative ways. We need to harness these existing good practices and look to share these across Wales and explore options to embed this into the curriculum working. There are also considerable opportunities through the 21st century schools programme.



Actions

No.	Action	Timescale
20	Work with our partners to promote engagement between schools, learners and employers to build confidence and knowledge of the world of work, and support learners to make informed choices about their careers and their futures.	<i>Short to medium term</i>
21	Support young people and early years to achieve their potential by making informed career choices by: <ul style="list-style-type: none"> a) Working with Careers Wales, Working Wales, Further Education, Higher Education and industry experts to develop skills progression pathways to support careers advice and guidance for learners to provide clear career choices for net zero skills. b) Continuing to support and engage with children and young people via events and school sessions providing direct links with Ministers and officials. c) Working closely with young people and schools to make sure our messages are helpful and engaging and provide useful opportunities for their feedback in relation to net zero skills. d) Providing opportunities to feed into the net zero skills development online questionnaire, workshops etc. e) Linking with teachers to understand what they are hearing from young people and what support they need in relation to net zero skills f) Challenging occupational stereotypes. 	<i>Ongoing</i>
22	Source evidence from schools that have engaged effectively with employers and industry, engaging pupils in net zero skills and seek opportunities to share good practices across Wales.	<i>Short term</i>
23	Continue to work collaboratively with the 21st Century Schools Programme to identify skills gaps and seek innovative opportunities to meet these requirements, which will inform future skills needs and engage our young people in net zero skills.	<i>Short term</i>
24	We will learn from and work with sectors to embed the identified skills outcomes from Skills Competitions. Learning from these outcomes will provide a useful driver to support skills development. Competitions are based on the needs of each of the sectors that are 'represented' in the competitions. New to this year's competition portfolio will be the Renewable Energy sector including a Green Renewable element linked to the land-based sector.	<i>Ongoing</i>
25	We will work with Education colleagues to consider how the Curriculum for Wales is developing digital skill competencies for our future workforces.	<i>Ongoing</i>
26	Ensure the new curriculum provides young people with opportunities to learn about net zero and does not reinforce existing inequalities.	<i>Long term</i>

Case Study: Nest Scheme

In 2020–21, the Welsh Government provided funding of £20.1m to deliver the Nest scheme, making energy-efficient improvements to more than 4,500 lower income households and providing free advice to a further 15,000 people.

Low-income households and those living in deprived communities can benefit from home improvements such as insulation or a new energy efficient boiler. Since 2011, the scheme has been managed by British Gas but improvement work is contracted out to 35 SMEs across Wales.



The Welsh Government scheme **encourages contractors to take on apprentices** and between April 2018 and March 2023, it will have invested more than £200,000 in apprenticeships and training. With a big demand among contractors for upskilling in green energy skills, a further £10,500 has been set aside to continue solar PV installation training.

Raising aspirations of the future **designers and creators of the future**, the Nest scheme has launched a schools' competition called Cre8. **To increase young people's engagement with STEM subjects**, students design and create energy efficient products, supported by mentors from local businesses.

Case Study: Sustainable Communities for Learning Programme

South Point Primary School, formerly Llancarfan Primary, is the first net zero carbon school in Wales. **South Point Primary School is a flagship project as part of the Sustainable Communities for Learning Programme**, acting as a pilot scheme for the Welsh Government, demonstrating how the Low Carbon Delivery Plan and Wellbeing of Future Generations (Wales) Act 2015 can sustainably shape and enhance the built environment.

To maximise end-user comfort and ensure there is a seamless transfer of knowledge throughout the lifecycle of South Point Primary School, the ISG Construction project team developed a **teaching resource in the form of a QR code trail**. Ten QR codes explained Climate Change including the causes, the effects and why we need to do something to combat these issues. The other 13 QR codes explained Net Zero Carbon, the functionality of South Point Primary and how aesthetically, it looks like a 'normal' school, but is the first net zero carbon school in operation in Wales.

The net zero carbon school is a great way to **engage children** in gaining an understanding of climate change with the hope to inspire them to access net zero opportunities to meet the needs of our future workforce. **Children also learn to understand how their own actions can have an impact on climate change**, learning valuable life skills that they can take home to their families, friends and communities.





Partnership Approach

What are we trying to achieve?

To ensure a cross-government collaborative and partnership approach to meet our skills commitment, drawing on the strength of our social partnership way of working.

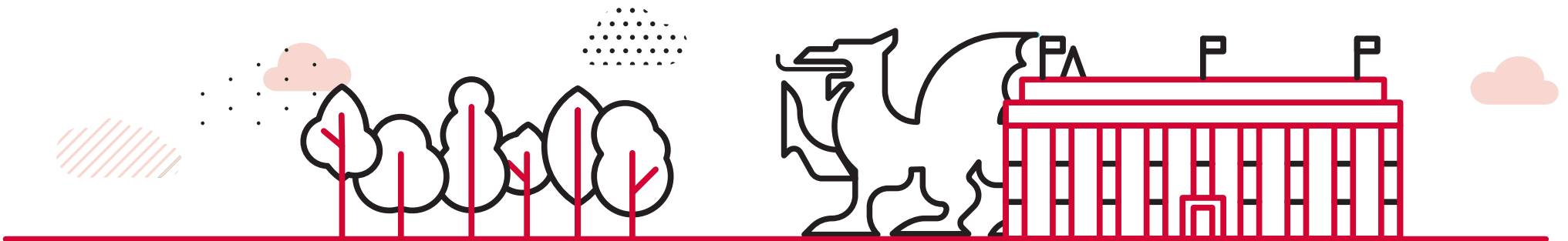
What are the challenges?

Given the scale and complexity of this task, a cross-government and partnership approach will be needed. It is the responsibility of us all to work towards meeting our net zero commitments – individuals, businesses, stakeholders, public sector and Welsh Government must all play their part. We believe that the ‘Welsh way’ should be characterised by partnership, shared ownership of problems and a shared commitment to joint solutions.

Current Position

In developing the Plan, we have undertaken extensive engagement with internal and external stakeholders, building strong networks with over 200 stakeholders to discuss potential opportunities and actions and have analysed existing evidence and research.

A number of task and finish groups were established to inform the Plan’s development and will continue through the implementation phase. This ensures a partnership approach, drawing on our social partnership way of working.



Actions

No.	Action	Timescale
27	Explore ways in which cross-government policies can better emphasise on the impact of skills at the development and review stage, particularly those that directly support or impact on net zero targets.	<i>On going</i>
28	Establish an external Net Zero Skills Communication Group to drive a consistent approach. The Group will support consistent messaging and language, understand relevant labour market intelligence and undertake information sharing.	<i>Short term</i>
29	Provide an active role in the Four Nation Net Zero Working Group to promote a joined-up approach, share good practice and learn from across the nations.	<i>Ongoing</i>
30	Work with the Climate Change young people groups to: <ul style="list-style-type: none"> • support and engage with children and young people via events and school sessions providing direct links with Ministers and officials • work closely with young people and schools to make sure our messages are helpful and engaging and provide useful opportunities for their feedback • provide opportunities to feed into the net zero skills development via an online questionnaire, workshops etc • link with teachers to understand what they are hearing from young people and what they need support in. 	<i>Ongoing</i>
31	We will maintain our strong partnership approach during implementation, working with industry, Trade Bodies, delivery partners, Learning providers, key stakeholders such as Federation of Small Businesses and Confederation of British Industry, and equality experts.	<i>Ongoing</i>
32	We will work with our key delivery partners (including Careers Wales, Working Wales, Trade Unions, Qualifications Wales, provider networks and stakeholders) to ensure net zero skills are fully considered when developing strategies, policies and sector reviews.	<i>Ongoing</i>

Case Study: Transport for Wales' route to net zero

Transport for Wales is a wholly-owned, not-for-profit company set up by the Welsh Government to deliver the vision of safe, accessible and sustainable travel across Wales.

It is currently driving forward a multi-million pounds investment to transform the valley lines and the running of an extra 29% services every weekday over the coming years.

Transport for Wales has appointed a **Climate Change Manager who works towards decarbonising Transport for Wales'** direct operations and the provision of a safe and reliable transport network in the face of future extreme weather.

172km of track will be electrified across the Valleys network, powered by renewable energy; a significant proportion of which will be sourced in Wales. Transport for Wales is also exploring the potential to use lineside renewables.

There are also plans for whole life carbon assessments on new buildings and structures in order to lower lifetime emissions.

The drive to net zero is requiring fundamental changes in operations which is why Transport for Wales has teamed up with Cynnal Cymru to deliver bespoke carbon literacy training for colleagues.

A programme of Lunch & Learns is also helping colleagues understand how to undertake a climate risk assessment and how to use the new, interactive dashboard for carbon reporting.

And as services increase across Wales so too do job opportunities which will include on-train customer service staff and engineer apprentices.



Case Study: Pendre

Tom and Beth Evans farm at Pendre, a sheep farm at Llanfihangel y Creuddyn near Aberystwyth. Since 2019, Pendre has been a Demonstration Site for the Welsh Government's Farming Connect programme which **helps farms research, trial and implement** more efficient and profitable ways of managing their businesses. The results are then **shared to encourage learning across Wales' agricultural sector**.

The Evans family has adopted rotational grazing which means that livestock is concentrated on a smaller area of pasture by subdividing larger fields into paddocks and then moved every few days.

Giving the fields a rest period of 22–30 days means that the root structure of the grass is improved and banks up energy. Pendre is now growing a third more grass a year and halved its use of concentrate feed, saving money and shipping miles.

And there are early signs which show that rotational grazing increases soil organic matter. This helps to store carbon which means it is not emitted into the atmosphere. Farming Connect calculated that if levels of sequestered carbon increased by just 0.3%, the farm would be in a negative carbon position which means it absorbs more carbon than it releases.

The West Wales farmer has attended **Farming Connect's Prosper from Pasture programme**. It is a continuous professional development programme that aims to develop knowledge and confidence in managing pasture. Since Tom joined the programme, it has evolved and now offers education at entry level, master grass and advanced level.

As a Demonstration Site, Pendre has **hosted an open day and a live webinar so that other farmers can find out more** about what has been achieved as well as lessons to learn for the future.





Just Transition Approach

What are we trying to achieve?

Ensure that no one is left behind and individuals of all ages can receive a high-quality education, equipping learners with the required skills to secure jobs that provide fair work and where businesses and workers can thrive in a net zero economy that champions fairness and equality.

What is the challenge?

The Wales Centre for Public Policy's *Net zero skills: Insights and evidence from emissions sectors in Wales*⁴ report found that the workforce in many sectors is predominantly white and predominantly male. Their findings show the challenges an ageing workforce creates in terms of succession planning by needing to consider options for replacing retiring workers as well as preparing for the transition. This risk is particularly notable in some sectors such as rail, where the high proportion of older workers will see large numbers retiring. Whereas progress has been made towards redressing the gender imbalance in some sectors, it still needs to be strengthened in others.

Further research and consideration are needed to fully understand the size and complexity of the challenge and possible solutions to secure accessibility for all and strive to ensure no one is left behind.

Current Position

Delivering a just transition will mean no-one is left behind as we move to a cleaner, stronger, fairer Wales. We will develop a clear understanding of the impacts of change, positive and negative, and how to make sure these are fairly distributed in society. In doing so, we have committed to learning lessons from the past and building a future for Wales that supports a wellbeing economy.

Cardiff University has undertaken research, through the mainstreaming equality policy framework model, to support the implementation of the Plan. A policy development tool has been developed to prevent existing labour market inequalities being carried

through into the new net zero and digital economies. The final report with their key findings will be published shortly.

We have worked with our partners and stakeholders to consider the outline findings of existing research to explore ways in which we can approach the future skills needs with a significant focus on equality and opportunity for all. Our actions outline our initial steps, but this requires a step change in approach and we will ensure, through the monitoring of this Plan that we highlight good practice, work in ways to overcome barriers and work on collaborative solutions.



4. <https://www.wcpp.org.uk/publication/net-zero-skills-insights-and-evidence-from-emissions-sectors-in-wales>

Actions

No.	Action	Timescale
33	Consider the evidence, insight gathered and recommendations of the Mainstreaming Equality and Just Transition project, prepared by Cardiff University. Develop appropriate actions or undertake further research and consultations based on the findings.	<i>Short to medium term</i>
34	With local authorities and other partners, build on the success of our community employability programmes, to continue delivering intensive support to our priority groups in their communities. Priority groups include Black, Asian and minority ethnic groups, (including migrants), disabled people, those with a learning disability, women, lone parents, carers, young people and older workers.	<i>Short to medium term</i>
35	Continue to take positive action to drive forward a culture of change on the apprenticeship programme, employability programmes, Higher Education and Further Education to ensure it is accessible to a diverse range of learners.	<i>Short term</i>
36	Draw on the social partnership approach to fully understand the equality challenges and focus on the work we need to do collectively, to achieve a fair and equitable labour market in Wales.	<i>Short to medium term</i>



Case Study: Cradoc's Savoury Biscuits

Cradoc's Savoury Biscuits Ltd, based in the heart of Brecon, has been baking crackers since 2008. Originally set up from the kitchen table by Allie Thomas and her daughter, Ella, the business now supplies supermarkets, delicatessens and online shops and exports to Europe as well as the Middle and Far East.

In 2019, Cradoc's made the **conscious business choice to be fuelled by a green energy supplier** and, where possible, ingredients are sourced locally. **Its staff are encouraged to walk to work and the company car is electric. Its eco credentials are boosted further by its packaging which is made from certified sustainable sources.** Any redundant stock is sent to the local foodbank to avoid it ending up in landfill.

Owner and manager Allie Thomas recently attended a six-week **Food Skills Cymru course that focussed on sustainability**. The course has inspired her to develop and implement Cradoc's own training module for staff on waste management, which will spell out the climate crisis and how taking steps can help. She hopes the new training will see a further increase in recycling.



Case Study: Cwmni Eginio

Cwmni Eginio (CE) was established in 2021 by Welsh Government to deliver a site development plan for Trawsfynydd, focused on socio-economic growth. Since then, there is increased policy focus on new nuclear power generation as a means of delivering net zero and increasing energy security.

By 2027 CE vision Trawsfynydd to be the site of the first small modular reactor under construction in the UK with North Wales recognised as a centre of excellence for low carbon energy.

Securing such developments will bring much needed high quality jobs and growth opportunities to the Trawsfynydd area.



Summary

Related publications

Net Zero Wales Carbon Budget 2 (2021 to 2025)

<https://www.gov.wales/net-zero-wales-carbon-budget-2-2021-2025>

Stronger, fairer, greener Wales: a plan for employability and skills

<https://www.gov.wales/stronger-fairer-greener-wales-plan-employability-and-skills>

For Further Advice and Guidance or just to see how you can get involved,
email: netzeroskills@gov.wales