

Going Global Partnerships

DEVELOPING SKILLS FOR A GREENER FUTURE

**Our work in technical and vocational
education and training**

March 2025

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Glossary

AoC	Association of Colleges
BEST	Built Environment Sustainable Transition
CIAG	Careers, Information, Advice and Guidance
COGC	City of Glasgow College
COP26	26th United Nations Climate Change Conference
CPD	Continuing Professional Development
DfE	Department for Education
DYE	Developing Young Workforce
EDI	Equality Diversity and Inclusion
ESD	Education for Sustainable Development
ESP	Energy Skills Partnership
ETF	Education and Training Foundation
FE	Further Education
GCAP	Green Construction Advisory Panel
GESI	Gender Equality and Social Inclusion
GGIP	EU Global Gateway Investment Package
GGP	Going Global Partnership Programme
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GSAP	Green Skills Advisory Panel
HRDC	Human Resource Development Corporation
IfATE	Institute for Apprenticeships and Technical Education
ILO	International Labour Organisation
LMI	Labour Market Information
MEL	Monitoring Evaluation and Learning
MQA	Mauritius Qualifications Authority
NTAR	National Training Academy for Rail
Ofqual	Office of Qualifications and Examinations Regulation
ONS	Office for National Statistics
PBL	Project Based Learning
PIC	Public Information Campaign
PPP	Public Private Partnership
QA	Quality Assurance

SAG	Sector Advisory Group
SCQF	Scottish Credit and Qualifications Framework
SDF	Skills Development Fund
SDG	Sustainable Development Goals
SDS	Skills Development Scotland
SEZ	Special Economic Zone
SSC	Sector Skills Council
TA	Technical Assistance
TNE	Transnational Education
TVET	Technical Vocational Education and Training
WCG	Warwickshire College Group
WBL	Work-based Learning

Executive Summary

Technical and vocational education and training (TVET) plays a crucial role in supporting economic transition towards net zero, equipping workers with the skills they need to work with new materials and systems. TVET has a transformative effect in empowering economically threatened and socially marginalised communities to access emerging green sectors and jobs.

Through the Going Global Partnerships programme, which supports mutually beneficial higher education and TVET collaborations between the UK and other countries, the British Council has made an important contribution to the development of global TVET capacity to meet the challenges of climate change. This report describes how interventions conducted through the Going Global Partnerships programme have created international stakeholder networks, developed TVET sector capacity, commitment and expertise in delivering skills needed for a greener future in 13 partner countries in Africa and South Asia.

The British Council's interventions promoting green TVET system reform and capacity building have been implemented through three interlinked areas:

- Sharing of knowledge and good practice,
- System reform, and
- Institutional capacity building

Sharing of knowledge and good practice has mainly been conducted through a series of **seminars**, system reform through the development and application of a Greening TVET systems self-assessment **tool** and aligned follow up activities, and capacity building through **institutional partnerships**. The report identifies the impact of activities conducted in these three areas mapped to seven overarching greening TVET themes:

- policy coherence and vision,
- labour market intelligence (LMI) and skills anticipation,
- employer engagement,
- curriculum and assessment,
- learner engagement and support,
- institutional strengthening and TVET workforce development, and
- financing

Reviewing activities through this framework of themes elicits a broader understanding of the factors impacting on TVET system capacity to align with the demands of the green economy. Insights included an understanding of the shared challenges and prioritisation of TVET system capacity development to deliver green skills.

Shared challenges to effective green skills policy implementation were highlighted with an accompanied need for targeted technical assistance for policy makers and TVET agencies.

Policy implementation and sector coordination would be enhanced through **public-private partnership (PPP) forums** providing opportunities for dialogues between government, employers and training providers and the implementation of monitoring frameworks.

TVET system capacity to deliver programmes aligned with emerging industry skills demands is limited by restricted access to **quality and current labour market information (LMI)**. There is a need for dialogues sharing approaches to LMI gathering and the dissemination of available green sector/jobs data across the GGP network. LMI would be enhanced through technical assistance developing **labour market observatories** providing access to LMI on emerging green sectors.

It is important to enhance **employer engagement** by sensitising them towards new economic opportunities in emerging green sectors. Employer engagement needs to be embedded into labour market dialogues through the introduction of strong PPP forums and sector bodies models. Employer engagement can be enhanced through developing their capacity to contribute to the development and delivery of **work-based learning (WBL)**.

There is a need to promote green opportunities to learners, their families, and communities through targeted **public information campaigns (PICs)**, and enhanced **careers information advice and guidance (CIAG)** resources explaining green employment opportunities. The introduction of CIAG resources should be accompanied by career counsellor training on green employment routes.

There are significant barriers to learner and employer engagement in the **informal sector** accompanied with limited awareness of green economic opportunities. The size of the informal sector in many of the GGP partner countries demands a planned and targeted approach to introducing and embedding green TVET concepts. Learner engagement activities must also promote **positive GESI outcomes** enhancing access to green economic opportunities.

There is a consensus on the importance of targeted skills programmes developed in consultation with employers to supplement mainstream TVET curriculum. Curriculum development should include **programmes for existing workers, WBL and entrepreneurship skills**. The delivery of new green programmes requires TVET institutional strengthening and workforce development interventions. This includes **TVET instructor upskilling activities** developing capacity and confidence to deliver green skill training and industry/TVET partnerships promoting **access to green technological resources**.

There was a shared emphasis on the positive impact of **international partnerships and peer-to-peer exchanges** in shaping institutional strengthening and TVET workforce development.

Innovative financing mechanisms are needed to support positive green TVET outcomes including through targeted utilisation of **employer levies and skills development funding**.

It is important to develop funding models that incentivise and capacitated TVET providers to deliver green training that often requires expensive resources and instructor upgrading.

Impact and achievements

The British Council's interventions supporting green TVET system reform had a significant impact on the partner countries' approaches to and understanding of greening TVET models which can be highlighted through the following outcomes.

The convening of **seminars** sharing UK and global approaches to developing TVET responses to the climate emergency has attracted over 200 international delegates and experts creating networks committed to the positive realisation of shared green objectives and inspiring national approaches. The events have provided platforms for UK stakeholders to showcase their expertise to senior international partners. The range of countries and stakeholders, drawn from government, TVET sector, and industry, attending the seminars demonstrates the British Council's unique capacity to convene global TVET dialogues, acting as a thought leader in promoting positive green economic transition and building partners' knowledge and capacity. The seminars have reinforced concepts of a 'just' transition through the introduction of gender equality and social inclusion values that promote access to green skills and jobs. Seminar dialogues have informed the development of thematic areas (e.g. skills for renewable energy) for further partnership activities and have provided an opportunity to present and discuss green transition planning tools, such as the greening TVET systems self-assessment tool.

The development of impactful **TVET sector planning tools** has allowed stakeholders to self-assess the impact and level of their contribution to green interventions, whilst providing data to inform planning across the TVET spectrum. Findings have provided a foundation for targeted British Council-led follow up planning activities, conducted in collaboration with national stakeholders, establishing TVET sector green roadmaps that feed into national skills reform agendas.

Institutional partnerships have established a global network of strong peer-to-peer relationships working towards the development of TVET models responsive to requirements of the green economy. Partnerships have informed the development of green-facing curricula and short courses, the introduction of toolkits, instructor development and impactful public-private partnership (PPP) models. Curriculum and short course development has included a focus on specialised training for emerging renewable technologies and sectors such as photovoltaic (PV) installation, green hydrogen training and the development of sustainable construction sector PPP forums. Developed PPPs have been built on international best practice such as the introduction of the Green Skills Advisory Panels in Nepal and Malawi, which has utilised UK models to bring together construction sector stakeholders to discuss emerging sector skills needs and employment opportunities. The British Council developed partnerships have promoted the embedding of positive gender equality and inclusion outcomes, and supported development of entrepreneurship and employability skills promoting the successful transition to emerging green jobs.

1. Introduction

Going Global Partnerships

The challenges of climate change demand a global response through reshaping societies, economies, industries and labour markets. The British Council's 'Strategy to address climate change to 2026' sets out how the organisation will respond to the climate emergency by engaging with people globally through arts and culture, education and the English language.¹ This includes the pivotal role played by technical and vocational education and training (TVET) in developing skills needed to adapt to emerging economic challenges and opportunities.

This report describes how interventions conducted through the British Council's Going Global Partnerships (GGP) programme have supported partner countries in developing their TVET sectors' capacity to promote the realisation of a just green economic transition. GGP builds strategic, mutually beneficial partnerships in higher and further education (TVET) between the UK and other countries. These partnerships contribute to stronger, more inclusive and globally connected higher education (HE) and TVET systems, with the UK seen as a trusted partner. Through international partnerships, system collaborations and opportunities to connect and share, the British Council enables stronger transnational education, more collaborative research, higher quality delivery, enhanced learner outcomes and stronger, internationalised, equitable and inclusive systems and institutions.

Since 2021, the British Council has been delivering the TVET strand of the GGP programme in 13 countries across Sub-Saharan Africa, South Asia and MENA regions (in Botswana, Bangladesh, Ghana, Malawi, Mauritius, Morocco, Mozambique, Nepal, Pakistan, South Africa, Sudan, Tanzania, and Uganda). Low- and middle-income countries are disproportionately affected by climate change, whilst they have contributed least to global emissions. They often rely on polluting primary industries and their large informal sectors are a challenge to systematic greening skills and training interventions. The greening of TVET to support partner countries' capacity to maximise social and economic opportunities of climate action whilst mitigating the challenges has been an increasingly important dimension of the British Council work. This report highlights how the organisation has worked to support greening of TVET by bringing diverse perspectives to climate dialogue through three interlinked activities.

- I. **Sharing of Knowledge and International Good Practice** conducted through a series of policy seminars exploring TVET's role in supporting transition to green economy. These events have facilitated dialogues between policy makers, private sector, and TVET representatives.
- II. **System Reform** supported through the application of a 'Greening TVET systems self-assessment tool' which aims to help governments to identify how green their national TVET systems are at policy, industry and implementation levels.

¹ Our strategy to address climate change to 2026, The British Council, 2024

III. **Institutional Capacity Building** conducted through a series of partnerships between UK TVET colleges and global peers.

This report reviews the British Council's contribution through exploring the impact of these three core intervention areas through the framework of seven green TVET system themes:

- Policy coherence and vision
- Labour market intelligence (LMI) and skills anticipation
- Employer engagement
- Curriculum and assessment
- Learner engagement and support
- Institutional strengthening and TVET workforce development
- Financing

The implementation of activities across these thematic areas allows interventions to be conducted across the whole TVET spectrum. The approach provides insights on how different TVET stakeholders can contribute to greening activities across a range of areas and where technical assistance and capacity building can be most effectively targeted.

Aligning with other greening of TVET programmes

The British Council interventions presented in this report have contributed to advancing the United Nations' 17 Sustainable Development Goals (SDG) and countries' commitment to urgent action on climate change under the 2015 Paris Agreement. This includes in alignment with other development partners' greening of TVET activities.

The ILO's 'Greening TVET and skills development: A practical guidance tool' (2022) emphasises the importance of a collaborative approach to the development of effective green TVET models.² The tool provides guidance on key elements of greening TVET, such as building teacher and trainer capacity, sector and institutional governance structures, sensitising enterprises on green economic opportunities, social dialogue, funding of TVET and environmentally sustainable campuses. The approach reflects the British Council's own Greening TVET Self-Assessment Tool that reviews elements of greening across a spectrum of TVET system themes.

The UNESCO- UNEVOC 'Greening Technical and Vocational Education and Training: A Practical Guide for Institutions' (2017) identifies that the transition to a green and sustainable economy requires a dramatic shift in the way jobs are performed through a significant upgrading of existing skills.³ This includes both the development of skills to equip people to work in new climate-friendly occupations and the greening of existing jobs. The guide

² Greening TVET and Skills Development, <https://www.ilo.org/publications/greening-tvet-and-skills-development-practical-guidance-tool>, ILO, (2022)

³ The UNESCO- UNEVOC Greening Technical and Vocational Education and Training: A Practical Guide for Institutions (UNESCO- UNEVOC, 2017) <https://unevoc.unesco.org/up/gtg.pdf>

provides clear indicators for TVET institutions to consider the greenness and sustainability of their provision and facilities. The British Council's partnerships have supported and aligned with UNESCO-UNEVCO objectives through supporting system and institutional capacity to develop and deliver curriculum and programmes aligned with the demands of the green economy.

Providing education and training to meet the green jobs and skills requirements has become an important agenda for UK's Skills / TVET sector and the British Council has sought to align with and support wider UK activities. The Association of Colleges (AoC) has developed the Green College Commitment campaign, which presents the critical role of colleges in achieving the net zero targets.⁴ The Institute for Apprenticeships and Technical Education (IfATE) have published two key reference points to define green skills and support employers in the development of green apprenticeships. The first is the shades of green definition developed by IfATE to differentiate between, Green Jobs (Dark Green), focussed entirely on reducing carbon emissions and protecting biodiversity and the environment, Green Skills (Mid Green), have a significant impact on reducing carbon emissions and Green Behaviours, processes and practice (Light Green) that have an indirect impact on the reduction of carbon emissions.⁵ Once employers have determined the shade of green of their occupation, IfATE have developed [a Sustainability Framework](#) that needs to be considered in the development of an apprenticeship. The Framework aims to support the UK in achieving its commitment to the target of net-zero carbon emissions by 2050 and the 17 SDGs.

The UK has identified sectors such as power generation, construction, waste and resources as being crucial for the net zero transition. These sectors tend to have an ageing workforce with a substantial proportion approaching retirement indicating a need for strategic TVET interventions. To address the upskilling requirements of the existing workforce the transition towards net zero requires the introduction of short training courses to equip workers with the knowledge to work with new materials and/or systems. The UK has also identified opportunities to improve diversity in key sectors as a medium to mitigate green skills shortages

The UK government is not alone in placing a greener more sustainable economy high on its skills development agenda. The EU has also identified this as a priority for funding in developing countries. In Sub-Saharan Africa, a region that is suffering the direct consequences of climate change, the EU has prioritised actions that support and enhance the development of green and blue economies (Clean Energy, Waste Management, Sustainable Tourism). EU activities are conducted through the EU Global Gateway Investment Package (GGIP) which supports Africa's strong inclusive green and digital recovery and transformation by accelerating green and digital transitions leading to increased sustainable growth and decent job creation, built on improved education and training models.

⁴ <https://www.aoc.co.uk/news-campaigns-parliament/aoc-campaigns/current-campaigns/green-college-commitment>

⁵ <https://occupational-maps.instituteforapprenticeships.org/green-themes/>

2. Sharing of knowledge and international good practice

Creating opportunities for knowledge sharing is a core element of the British Council's greening of TVET activities. As part of a series of GGP programmes and events, the British Council has delivered three seminars focused on TVET's role in supporting a green economic transition:

- 'TVET for a Sustainable Economy' held in Coventry, UK (2022)
- 'Green Skills and Retrofitting the Economy' Cape Town, South Africa (2023)
- 'Developing Industry-led TVET for a Greener Future' Glasgow, UK (2025)

The seminars bring together senior government officials, policy makers, private sector representatives, and training providers to share approaches, challenges and good practice in the TVET system, whilst receiving input from UK and international experts.

Seminar topics are selected in consultation with partner country stakeholders and the recent focus on green issues (two of the last three years) demonstrates the growing global prioritisation of the topic across the GGP network. The seminars are delivered through a combination of presentations, panel discussions, peer planning sessions and employer site visits.

The seminars were either hosted in or located to allow for visits to TVET colleges providing delegates with opportunities to meet sector leaders, instructors and learners, whilst observing the utilisation of new, including green, technology for TVET delivery. The events provided a platform for peer-to-peer knowledge exchanges through the identification of priority actions emerging from the input sessions.

Overview of GGP knowledge sharing events

‘TVET for a Sustainable Economy’ Coventry, UK (2022)



Context and scope: Coventry is situated in England’s West Midlands, a regional hub for advanced manufacturing and engineering, energy and low carbon industries. This allowed the delegates to visit companies and stakeholders at the vanguard of the transition to Industry 4.0 and innovative practice in meeting emerging, including green, industry skills need. Coventry is also an important location for key TVET agencies hosting both the Office of Qualifications and Examinations Regulation (Ofqual) and the Institute for Apprenticeships and Technical Education in residence (IfATE) ⁶ promoting opportunities for meetings with policy makers.

The seminar was attended by over 50 senior TVET sector representatives, from 10 GGP-TVET partner countries, drawn from government, providers, and industry.

The programme explored concepts of a sustainable economy driven by industry demanded sustainability skills and wider green competence underpinned by digital and soft skills. Key themes explored through the seminar included:

- Approaches to accessing Labour Market Information required by decision makers to align TVET with the skills demands of green transition and emerging green employment opportunities
- Approaches to facilitating effective employer engagement in the identification of industry demanded green skills and jobs

⁶ IfATE is being subsumed (Autumn 2024) into a wider national skills agency called Skills England, which is situated in the Department for Education (DfE). It is anticipated that Skills England will have a broad remit aligning skills needs with the government’s industrial strategy with power to influence TVET policy across Government ministries. Skills England will also include the DfE’s Unit for Future Skills, formed in 2022, and other existing DfE skills facing officials.

- Designing quality assurance models promoting the effective delivery of TVET provision
- Insights on WBL and apprenticeship models aligned with green jobs/sectors
- Supporting learners to develop career pathways in new green jobs and sectors through impactful careers, information, advice and guidance models that promotes their understanding of green employment opportunities

The seminar highlighted the role of partnerships in creating a demand-driven system that embeds employers in the development of training standards, curriculum and assessment tools. Sessions included insights on UK TVET policy development and delivery through input by the DfE, IfATE, and Ofqual. There was an opportunity to visit Warwickshire College Group, a public sector TVET college, with a focus on training activities aimed at the Electric Vehicle sector, and an industry led training centre, the National Training Academy for Rail (NTAR) which highlighted how modern industry equipment and expertise are embedded into the TVET system. The sessions included input from sector advisory bodies through the Education and Training Foundation (ETF) and Gatsby Foundation and England's TVET college sector representative body, the Association of Colleges (AoC).

Outcomes: The level of stakeholder engagement demonstrates the British Council's capacity to mobilise UK TVET sector leaders to contribute to knowledge exchanges. Through meetings with employers, agencies and policy makers, delegates gained important insights into how public-private partnerships play a core role in the development of quality and relevant TVET provision. Seminar dialogues reinforced how these partnerships can be particularly impactful for the introduction of training aligned with emerging skills needs for new green jobs.

'Green Skills and Retrofitting the Economy: the pathways to sustainability', Cape Town, South Africa (2023)



Context and scope: The selection of Cape Town, one of Africa's greenest cities,⁷ meant that delegates could explore TVET contribution to green municipal initiatives being conducted through the development of sustainable housing, public transport systems, green spaces, and utilisation of renewable energy. It also provided an ideal setting to establish an African continent focus on greening issues and partnership opportunities.

The seminar was delivered in partnership with Nuffic, the Dutch organisation for the internationalisation of education. It brought together over 60 senior government officials, policy and decision makers, private sector representatives and training providers from 11 African countries and included insights from experts from the Netherlands and the UK.

The programme included sessions on conducting greening research, designing green training models and centres, and developing a shared understanding of key greening TVET themes. The event introduced concepts of a 'just' transition through skills models promoting opportunities for vulnerable communities to access emerging green opportunities. There was a visit to the Atlantis Special Economic Zone allowing delegates to gain insights on cutting edge industrial green practice, technology, and aligned skills development. This included presentations on a water solar heating pilot for surrounding communities and an EU-funded collaboration developing off-grid cooling and water solutions for hospitals and clinics in Africa. This provided valuable insights into how employers and communities can work together to improve lives and wellbeing through the application of green technologies and methods to solving societal needs. The programme also included visits to Bolland TVET college and Stellenbosch University highlighting green projects and innovative practice linked to digital CIAG.

Outcomes: The event created a forum for African TVET stakeholders to share knowledge, innovations and advocacy towards green skills development and mitigating the impact of climate change. It showcased projects from across the African GGP network, sparking innovative ideas for future interventions. Peer exchange sessions provided space for knowledge sharing on approaches to green curriculum and qualifications, designing training for renewable energy sector, development of skills to support green innovation (including smart greenhouses), and models for establishing specialist centres of excellence.

⁷ [*The World's Greenest Cities: Cape Town, South Africa*](#)

Developing Industry-led TVET for a Greener Future, Glasgow, Scotland, UK (2025)



Context and scope: Glasgow has played an important role in global climate change dialogues through hosting the UN Climate Change Conference (COP26) which allowed the seminar to align with wider political climate change agendas. The seminar was attended by over 40 senior TVET sector stakeholders, drawn from government, industry and training providers from all 13 GGP-TVET partner countries.

The programme: The event built on the foundation of the previous seminars in establishing a network of greening TVET practice and expertise amongst the GGP-TVET partner countries. It explored key greening TVET themes through discussions on:

- Impactful models and partnerships between government, industry, and training providers in generating industry-led green TVET
- Scottish TVET greening policy aligned with national climate strategies
- Industry-led training and WBL models through employer and college visits
- Establishing global peer partnerships and networks

The event was hosted at City of Glasgow College (COGC), a leading Scottish public TVET college. Speakers included Government of Scotland and Skills Development Scotland (SDS) representatives who presented Scotland's Net Zero strategy and aligned climate emergency skills plan. These insights were further reinforced through input from TVET facing agencies, Colleges Scotland, Energy Skills Partnership, highlighting how TVET colleges played an integral role in delivering skills for the green transition. The Scottish Credit and Qualifications Framework Partnership introduced an innovative model that allowed for a flexible approach to mapping training and qualifications allowing for the accreditation of employer driven skilling activities. The programme included employer visits exploring how TVET providers partner with industry in the development of both technical and employability skills demanded in emerging green sectors. The event highlighted employer-led CIAG activities promoting learners' successful transition to employment in emerging green jobs.

Outcomes: The seminar provided a platform to present policy, partnerships and delivery models underpinning TVET's strategic role in realising the Scottish Government's Net Zero strategy whilst enhancing learners' access to emerging green jobs and economic opportunities. Insights from the event have had an important impact on strategic planning and approaches to national TVET models. This included delegates referencing their intention to revise approaches to programme development, for example, highlighting the need to *'build future TVET curricula that incorporates sustainability and a green focus'*. The seminar demonstrated the importance of strong employer/TVET collaboration, which impacted on delegate planning, for example, *'I'll try to enhance involvement of employers in TVET institutes' activities to achieve the goals of Green TVET'* and *'We will ask for a better collaboration between the stakeholders in our process of becoming a circular economy'*. Delegates also emphasised the importance of Scottish colleges' commitment to GESI as an important lesson learnt: *'I will explore strategies for increasing accessibility and inclusion in vocational training programs to support diverse learners, including individuals with disabilities.'*

Seminars impact

The seminars have provided opportunities to share the UK approaches, priorities and achievements in greening TVET that can be contextualised to inform the development of national models. This included introducing England's national Net Zero Strategy, which sets out policies for decarbonising all sectors of the UK economy to meet net zero targets by 2050. The Glasgow seminar presented the role of TVET in realising Scottish Government's Net Zero strategy and ambitions to reach the target of zero greenhouse gas (GHG) emissions by 2045, with a 75% reduction by 2030.

Policy insights have impacted on TVET system planning and reform across the GGP network. For example, representatives from the Ministry of Education, Science and Technology (MoEST), Nepal, who attended the Coventry seminar, highlighted how insights will inform the development of Nepal's TVET Sector Strategic Plan (TSSP)¹⁰ being introduced through the EU-funded, British Council delivered, Dakchyata project. Glasgow seminar participant referencing the need to treat the development of skills as '*a national emergency*' demonstrates the role of the seminars in growing awareness amongst global partners of TVET's core role in green transition.

The seminars also highlighted the importance of collaborative approaches to green economic development; '*engage in social dialogue for responsive and collaborative labour market institutions and training systems and coordinate stakeholder needs at all stages of education and skills policy development and implementation*' (Cape Town participant). There were reflections on the importance of LMI, embedding sustainability in curriculum development, and the need for incentives to promote green outcomes. The seminars resulted in delegates reflecting on the challenges associated with green TVET interventions, including the need for aligned funding, advocacy, and trainer capacity building.

Participants reflected on the potential to introduce contextualised UK/international models to support national greening objectives '*draw on the (Energy Skills Partnership) ESP model to implement a similar partnership in South Africa*' and '*The need to have industry buy-in for effective implementation of Ghana's National TVET Qualifications Framework is critical*' (Glasgow participants).

Interactions between seminar participants and UK experts also provided platforms for further partnership activities. The seminars highlighted the importance of providing opportunities for peer-to-peer networking and knowledge exchanges in developing capacity and commitment to the greening of TVET across the GGP network.

3. System reform



Using our research and experience we create resources, practical tools and guidance for policy makers and practitioners to help improve skills systems and to help address common TVET challenges through international collaboration and sharing good practice.

System reform overview

In 2023, the British Council developed a “[Greening TVET systems self-assessment tool](#)” to support countries in establishing how green their respective TVET systems are. This includes measuring progress towards green TVET reform objectives, identifying successful initiatives, and informing policy, funding and strategic interventions. It also provides a platform for dialogues between policy makers, training providers, employers and other stakeholders on greening TVET system priorities. The tool is designed around 60 green attributes within a framework of the identified seven TVET themes:

- Policy coherence and vision
- Labour market intelligence (LMI) and skills anticipation
- Employer engagement
- Curriculum and assessment
- Learner engagement and support
- Institutional strengthening and TVET workforce development
- Financing

Taking this broad approach to defining green TVET empowers policy makers to think beyond a narrow focus on occupational skills for ‘green’ industries and imagine a wider 'systems strengthening' perspective.

The findings presented in this report include the implementation of the tool in Botswana, Ghana, Morocco, Mozambique and Tanzania.

System reform impact

The application of the self-assessment tool has brought together senior stakeholders from government, TVET, industry and civil society for national dialogues on green skills, sharing best practice and challenges. This has seen the development of a body of green knowledge across the GGP network, providing coherent links between research, policy, and practice, which has positioned the British Council as a partner of choice in developing green TVET system reform.

The British Council's system self-assessment studies have had a significant impact on participating countries' understanding of green TVET issues. This has included highlighting consensus on the strong political will and interest from governments in greening economies, whilst identifying disconnects between greening initiatives and TVET systems. The studies have emphasised the importance of developing a joint vision of greening TVET across the government, training providers and employers to support a just transition to a green economy. The need to clarify roles and responsibilities and to strengthen linkages with sectoral policies. Findings have also highlighted the importance of addressing greening through industry linkages by actively engaging employers in the implementation of green training and skills development with formal mechanisms for ongoing dialogue and collaboration. There is a common need to include the informal sector and ensure that there is sufficient TVET funding in place to develop the new programmes and resources needed to emerging green skills demands.⁸

Importantly, findings from the self-assessment tool have provided a platform for the British Council-led support for Botswana, Ghana, Morocco, Mozambique and Tanzania in shaping national greening TVET roadmaps. These follow up interventions have further created national greening TVET forums and networks bringing together key stakeholders, identifying sector priorities, and agreeing roles and responsibilities. This approach has introduced clear definable tangible steps for the greening national strategies that have been jointly developed and owned by national stakeholders. This outcome will have a long-term impact on participating countries' green TVET agendas ensuring an important legacy for the British Council's interventions.

⁸ https://www.britishcouncil.org/sites/default/files/greening_tvet_systems_comparative_analysis-full_research_0.pdf

4. Institutional partnerships



The development of institutional partnership opportunities has been an integral part of greening of the GGP's TVET activities. This strand of work builds on over 15 years of the British Council experience of linking UK further education colleges and TVET organisations with the partners worldwide. TVET providers have a fundamental role to play in supporting the global journey to net zero, by equipping the global workforce with the skills to support the jobs of the future. To stay both competitive and relevant, training providers must not only adapt to new technologies and approaches but must also look to strengthen their international connections in helping to address global issues.

The GGP-TVET partnerships have connected further education colleges and skills organisations in all four nations of the UK with partners in Botswana, Ghana, Malawi, Mauritius, Morocco, Nepal, South Africa and Tanzania to collaborate on projects with a focus on renewable energy and skills for green jobs. The partnerships established platforms for sustainable international programmes and practice that promoted the introduction of new curriculum and assessment tools for priority green jobs/skills, closer collaboration between employers and training providers, the identification of further partnership areas, and a global network of UK and international TVET sector peers.

Institutional partnerships overview

Country	Partner institutions	Sector and area of focus	Project summary
Botswana	Cornwall College Group (Duchy College), Outsourcery Services and and Barolong Vocational Training Centre (BVTC), Shoshong Brigade, Serowe Brigade, Tshwaragano Brigade	Sustainable agriculture	The partnership focused on curriculum development and improving stakeholder engagement to support regenerative and resilient farming. Duchy College provided strategic and mentoring support to Botswanan partners on the development of green skills to help communities address environmental challenges. This included through insights from the College's Net Zero project and aligned curriculum and training resources, including the Farm Carbon Toolkit. The project was delivered through online mentoring and training sessions, which facilitated the development of a network of Botswanan green 'champions' who were empowered to exchange best practice, creative ideas and environmentally friendly agricultural models with their students, local farmers and their wider community. <i>"The skills acquired by TVET lecturers in Greening Agriculture will go a long way to enhance and ensure best practices in Colleges which will eventually improve efficient food production for our economy and sustainable farming."</i> Mr Lesolame, Department in the Ministry of Education and Skills Development, Botswana
Ghana	Northern Regional College, Kumasi Technical University, Bolgatanga Technical University	Renewables	The partnership provided a platform for Northern Regional College to partner with Kumasi and Bolgatanga Technical Universities through a series of green TVET capacity-building activities. This included online and face-to-face workshops, meetings and training sessions for the participating institutions' staff and leadership teams. The development and delivery of partnership activities were informed through reciprocal visits to the UK and Ghana. The impact of the partnership included an enhanced capacity, across all the partners, to better develop and embed curriculum for green technology, renewable energy and green/renewable hydrogen production. This included the joint development, and potential delivery of two short courses that targeted priority green jobs and demanded skills. The partnership also supported training of staff (two from each institution) on the developed materials. Importantly, the project created

			a network of green expertise within the participating institutions, the wider TVET sector, and provided a platform for future joint activities.
Malawi	Exeter College, Outsourcery Services, Salima Technical College, Nasawa Technical College, Mangochi Technical College	Construction sector	The project facilitated the introduction of sustainable green practices in TVET, with a focus on the construction sector. This included through the introduction of innovative green TVET practice and tools, such as Exeter College's award winning and nationally recognised Green Construction Advisory Panel (GCAP). Dialogues conducted through the GCAP have informed construction sector curriculum, qualification and apprenticeship standard development. The partnership utilised the sector research and partnership meetings to contextualise the GCAP model to create a Malawi Green Skills Advisory Panel (GSAP) which will provide a platform for stakeholder collaboration on the identification of green skills and aligned curriculum development in Malawi. Alongside the development of the GSAP forum, project activities included building capacity of colleges in Malawi to develop/revise industry aligned curriculum and training, and knowledge exchanges through reciprocal visits to Malawi and the UK. Partnership activities were collaboratively developed utilising an initial sector study to gain a better understanding of current practices, stakeholders and gaps. Benefits of participating in the project for the partners included the opportunity to develop and internationalise the GCAP/GSAP model, enrich staff and students learning experience, gain insights on global green TVET practice, access new curriculum and assessment, and launch innovative PPP models through the development of the GSAP. All the partners agreed on the sustainable impact of the project, clearly demonstrating the value of the GGP programme in bringing UK and international peers together. <i>"The project has strengthened MCTC's institutional capacity, enhancing its reputation to become a centre of excellence for green skills training."</i> Mbasa Mwawembe, Mangochi Technical College

Morocco	Devon and Cornwall Training Provider Network (DCTPN) and Institutes of Renewable Energy and Energy Efficiency Training (IFMEREE)	Renewables	The partners collaborated in two key areas: • To build capacity in higher technical training, by incorporating innovative delivery methods and pedagogies to support learning in the solar and wind renewables curriculum. • To exchange knowledge and methodologies to support soft skills development, with a focus on employability, entrepreneurship and business start-up. With a core focus on capacity strengthening and the exchange of experience, the partnership enabled Petroc College (a DCTPN member) to share their expertise by providing targeted training and curriculum development support to IFMEREE. This included hybrid train-the-trainer e-learning sessions, focusing on technology-enhanced teaching. These sessions also provided opportunities to share knowledge and expertise around blended learning approaches, renewables curriculum, energy storage, grid integration, life cycle analysis and policy development. <i>"The knowledge gained from the UK colleges was transformative. We've disseminated it extensively across our network, reaching trainers, students, and industry partners. This collaborative learning has allowed us to embed advanced practices in our curricula and align more closely with industry needs."</i> Ayoub Mezroui, Director of Studies at IFMEREE
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Morocco	South Eastern Regional College (SERC), the Office for Vocational Training (OFPPT) and IFMEREE	Quality assurance with a focus on renewables sector	The project enhanced quality assurance (QA) and inclusive engagement in Moroccan TVET institutions. It was delivered through two phases, firstly, by establishing areas of development within the area of QA and pedagogical approaches to TVET education through a comparative review. Secondly, by utilising the outcome of the review to pilot project-based learning (PBL) as an approach to develop trainer skills, enhance trainee engagement and raise the quality of the learning experience. The curriculum area focused on the development of green skills. The partnership provided trainees with the opportunity to apply theoretical knowledge to practical tasks through the implementation of real-life projects. In addition to providing training in PBL, SERC established a monitoring framework to help trainers assess progress, implement necessary changes and ensure targeted outcomes were achieved. IFMEREE confirmed that the quality of teaching and learning improved significantly in their centres by incorporating PBL approaches into its curriculum. SERC benefited from the strong connection made with the partners and valued the opportunity to learn about curriculum management at a national level and the use of regional hubs in curriculum development. Anass Ait Laachir, Director of IFMEREE Tangier, highlighted, <i>“The most valuable outcome has been integrating quality-focused approaches and advanced green technologies into our training, preparing Morocco to lead in renewable energy education and meet the ambitions of Morocco's Energy Strategy.”</i>
Morocco	Petroc College and IFMEREE	Renewables	The partnership was built on a strong foundation established through previous GGP collaboration, further enhanced by student and staff exchange under the Turning Scheme UK programme. Both partners brought prominent regional and national roles in the green TVET sector to the project. IFMEREE are leading the development of skills for the green hydrogen sector in Morocco, whilst Petroc College plays a key role in developing skills for regional decarbonisation interventions in Southwest England and South Wales. The partnership provided an opportunity for the ongoing development of these established roles and links. This included through

			the design of curriculum and short courses for green hydrogen training. Roundtable dialogues developed shared understanding on green hydrogen models, and wider green skills activities, reinforced through mobility opportunities to explore partner training approaches. The partnership provided an opportunity to share tools, guidelines, and models. The key sector roles played by the partners were utilised in disseminating outcomes to stakeholders drawn from government, higher education, TVET, and the private sector.
Mauritius	Cardiff and Vale College, Mauritius Institute of Training and Development, Collège Technique St Gabriel, Mauritius Qualifications Authority, Academy of Design and Innovation, Kolektif Rivier Nwar	Green technology	The partnership developed a green technology curriculum and delivered an aligned series of green skills micro-credentials via a 'train the trainer' model, which project partners will cascade to other institutions in Mauritius. This partnership is still ongoing, but it is hoped the impact on green technology education and the skills training ecosystem in Mauritius will be significant. Achievements so far include support provided in the development of a new and bespoke curriculum framework for green technology education in Mauritius. Leadership and management processes have been strengthened, particularly in quality assurance and curriculum development. The foundation of a robust training programme for trainers in Mauritius has been laid with the training package delivered to the delegates on their visit to Cardiff and Vale College. It is hoped that a lasting outcome will be the engagement of more diverse talent into green technology as a subject and vocational pathway.
Nepal	Exeter College, DCTPN, Outsourcery Services, Devon and Plymouth Chamber of Commerce and Federation of Nepalese Chamber of Commerce and Industries	Construction sector	The project introduced of the UK's Green Construction Advisory Panel (GCAP) which provides a platform for exchanges on green skills needs between TVET providers and construction sector employers. The UK consortium shared the successes of GCAP including its contribution to improving and developing sustainable training programmes and offering an agile response to industry needs. This model was further developed in consultation with Nepali partners and stakeholders through meetings and a series of three online workshops and a final in-country conference: 'Supporting Private/Public sector engagement in TVET - A UK perspective'. This supported the development of a Green Skills Advisory Panel providing a platform for PPPs and exchanges on

			green sector skills needs between employers, policy makers, and TVET providers. Stakeholder testimonial Mike Blakeley, Exeter College highlighted <i>“To share the GCAP methodology worldwide is an aspiration for us at Exeter College and one that we are very proud of. It is a model that works well as a rapid response mechanism to emerging skills needs in our construction sector and for Nepal to embrace GSAP for their emerging green skills is wonderful to see.”</i>
South Africa	Petroc College, Outsourcery Services, Capricorn TVET College and Elangeni TVET College	Renewables	The partnership focused on skills for renewables sector and improving employer engagement. During action planning, partners agreed to work on the short course curriculum development (such as bootcamps) to enable a proactive response to a fast-changing renewables sector and to address youth unemployment challenge in South Africa. A visit to the UK provided opportunities to showcase UK TVET approaches, demonstrating TVET responsiveness to the local economy and its opportunities and challenges. South African delegates met partners from the maritime sector in the Southwest focussing on the skills requirements for the development of Floating Offshore Wind, attended the Appledore Middle Dock -Clean Hydrogen event where they met with representatives of the public and private sector keen to work in partnership to enhance green skills provision, and spent time with Petroc College senior leadership and tutors to share best practices. A return visit to South Africa enabled partners to continue to build the partnership with Capricorn and Elangeni Colleges, underpinned by a mutually beneficial visit to Northlink College, Cape Peninsula University of Technology and its state-of-the-art Renewable Energy training facility. The project enabled the partners to understand the similarities and differences in the skills systems in the UK and South Africa whilst also gaining hands-on experience of renewables training in both countries, meeting learners studying to be renewables servicing and maintenance operatives, staff delivering skills bootcamps and employers and other stakeholders building the renewables sector.

Partnerships impact

Engaging policy makers, such as Nepal's Council for Technical Education and Vocation Training (CTEVT), IFMEREE in Morocco, and the Mauritius Qualification Agency (MQA), has been a core theme running through the GGP partnerships. This has allowed partnerships to feed into TVET system strategic reforms such as Nepal's TSSP and the green TVET ambitions identified in Malawi's Vision 2063 MIP-1 implementation plan, and Green TEVET Policy.

The partnerships have impacted on the **capacity to conduct LMI activities**. For example, the Petroc/IFMEREE partnership has supported the identification of renewable sector skills needs, including in the areas of Hydrogen transition, fuel cells, and storage skills, renewable batteries, smart housing and sensors, electrolyzers. The Botswana partnership provided knowledge exchange and capacity building opportunities with industry (local farms and their supply chains), and other key stakeholders (NGOs, communities and government) around identifying climate change priorities and skills needs. The Nepal and Malawi partnerships both introduced PPP models, through the GCAP and GSAP concepts, to identify skills needs to inform the development of local skills improvement plans. Partnerships also included international mobility visits allowing delegates to access global insights and information on the core role LMI and data in informing greening TVET interventions and design.

Partnerships introduced **innovative models for embedding employers into the development of green TVET skills activities**. This included the utilisation and contextualisation of the GCAP model to develop GSAPs in both Malawi and Nepal's construction sectors. The Botswana partnership took an innovative approach to using mentoring from UK farming estates and training providers to develop the capacity of Botswanan peers to find collaborative solutions in addressing climate change challenges. Other projects, including the Petroc/IFMEREE collaboration highlighted approaches to using roundtable discussions to embedding employer input into the identification skills needs.

Several partnership projects supported the development of **innovative green curriculum and assessment models**. The Malawi project oversaw the introduction of UK green construction skills bootcamp models and bespoke short courses in areas such as external wall insulation, heat pumps and loft insulation, as well as upskilling on low carbon technologies such as PV's, solar hot water heating, and battery storage. This has led to the development of green construction qualifications in collaboration with the UK's National Open College Network (NOCN). The partnership has also supported the introduction of apprenticeship standards in construction (bricklaying, Carpentry, electrical and plumbing). The IMEREE/Petroc partnership allowed for expert exchanges on cutting edge approaches to developing training and skills for the green hydrogen sector and related areas in both Morocco and UK. The impact of the Ghana partnership has seen an enhanced capacity, across all the partners, to better develop and embed curriculum for green technology, renewable energy and green/renewable hydrogen production. This included the joint

development, and potential delivery, of two short courses that targeted priority green jobs and demanded skills. The Mauritius partnership included a focus on supporting the MQA in designing bespoke curriculum framework dedicated to green technology and related programmes aligned with identified workforce challenges and future skills solutions.

Strong **gender equality and social inclusion** values have been supported through the development of a just green economic transition, promoting access to new green jobs and opportunities to all. The IMEREE/Petroc partnership included a defined equality, diversity and inclusion (EDI) approach. This was built on a commitment to sharing best practice on promoting green sector access and inclusion such as Petroc's 'Women in Renewables' programme, sharing of resources and approaches that promote and support inclusion, and ensuring that GESI values are embedded throughout partnership activities.

Impactful **quality assurance models** have been introduced through the partnerships. For example, in Morocco, SERC shared their institutional self-assessment framework which support the development of a framework for continuous monitoring and self-improvement with their partners, IFMEREE and OFPPT. The Mauritius partnership focused on developing institutional leadership capacity to introduce and manage robust quality assurance processes.

The partnerships have introduced a series of **innovative modalities for institutional strengthening and staff capacity development**. The Botswana partnership has established a network of sector champions and green action groups within the Brigade (TVET) sector. The Ghana project has overseen training of staff (two from each partnering institution) on green skilling materials developed through the partnership. Similarly to Botswana, the project created a network of green expertise within the participating institutions which acts as a platform for wider TVET sector development activities. The opportunity to reinforce institutional capacity building through international mobility was viewed as an important partnership activity. The UK stakeholder visits to their GGP partners helped to contextualise the interventions and provided hugely valuable learning opportunities for the participating staff. The international partner visits to the UK allowed participants to observe best practice and access wider networks, for example, the Malawi partnership delivered a series of capacity building activities including through attendance at the UK's National Construction event held in Birmingham. Anass Ait Laachir, Director of IFMEREE Tangier, emphasized, *"The study visits were extremely beneficial for our delegation, offering us a direct look at the innovative practices in curriculum design and quality assurance that are shaping the future of vocational training in the UK. This hands-on experience has allowed us to incorporate these practices back into our own programs, ensuring they are aligned with global standards."* These visits not only deepened understanding between partner institutions but also built stronger trust and set the foundation for long-term collaboration.

5. Analysis

This section explores the impact of the three core intervention areas described above through the framework of seven green TVET system themes:

- Policy coherence and vision
- Labour market intelligence (LMI) and skills anticipation
- Employer engagement
- Curriculum and assessment
- Learner engagement and support
- Institutional strengthening and TVET workforce development
- Financing

Policy coherence and vision

Knowledge exchanges facilitated through the seminars provided insights for future policy design. For example, IfATE described England's innovative 'trailblazer' approach for employer-defined occupational standards. Coventry City Council shared its model for developing the skills needed to create opportunities for a sustainable zero carbon future. SDS and Scottish Government highlighted the embedded role of skills, as defined by the Climate Emergency Skills plan, in the government's Net Zero strategy. Similarly, DfE described the strategic development of England's skills agenda supporting the transition to green jobs.

System reform consultations highlighted an increasing prioritisation of strategic approaches towards the development of TVET systems' green capacity. Morocco's National energy strategy to 2030 includes ambitions to generate 52% of the country's electricity from renewable sources. The National Strategy for Sustainable Development (2017) sets out the transition to a green economy and the creation of green jobs, and the Low Carbon Strategy (2050) empowers regions, municipalities, and cities to play a key role in low-carbon and climate change responses. Tanzania's Development Plan 2025 and the National Strategy for Growth and Education of Poverty II (NSGRP II) embed green transition as a cross-cutting issue across other strategic economic objectives. This includes the introduction of TVET sector regulations instructing training providers to conduct institutional greening activities and green curriculum reviews. Nepal's TVET Sector Strategic Plan includes a focus on developing environmentally sustainable practices in key economic sectors.⁹

There are challenges with embedding green policy initiatives into TVET sector delivery. The disconnect between policy planning and implementation was highlighted in the Ghana study which described government perceptions of green commitments not being shared by other stakeholders. This demonstrates the importance of effective dialogues between government

⁹ https://dakchyata-nepal.org/sites/default/files/Final_%20What%20is%20TSRP.pdf

and TVET providers to foster sector capacity to respond to green objectives. Botswanan stakeholders referenced the need for a consultatively developed and budgeted government-led green TVET strategy to ensure joint stakeholder ownership (government, TVET providers, employers, donor agencies, learners and their communities). Similarly, the Mozambique assessment emphasises the practical implementation of green policies being reinforced through budget and resources. The study highlighted the role of monitoring and evaluation through key indicators to measure the transition from policy into implementation. The Morocco assessment recommended the introduction of a monitoring framework to track policy implementation. There are opportunities to introduce TVET greening policies built on the foundation current development interventions, for example, Ghana's sector digitalisation strategy has been built on the foundations of an EU TVET digital capacity upgrading project. The study also recommends the revision of existing TVET policies to include new green sectors and jobs.

Institutional partnership activities have promoted collaboration on TVET policy coherence and vision. This has included through partnership events, such as 'Supporting Private/Public sector engagement in TVET - A UK perspective' conference, organised in Nepal which promoted engagement with the Ministry of Education, Science and Technology (MoEST) and the national TVET agency, Council for Technical Education and Vocational Training (CTEVT). This has developed key stakeholders' awareness of the role of TVET in developing green skills and promoted their capacity to develop aligned policy. The Nepal partnership also highlights alignment with wider strategic interventions by building on the EU-funded Dakchyata project that was delivered by the British Council. Dakchyata developed policy and PPP capacity to engage on the implementation of industry relevant TVET models. This included capacity building interventions aimed at CTEVT and Nepal's employer associations, and supporting the development of a TVET sector strategy.¹⁰ Similarly, Malawi activities have fed into the British Council delivered, EU-funded, Zantchito Skills for Jobs project which creates a positive skills ecosystem for skills through establishing labour market PPPs.¹¹

Engagement with policy makers is a key theme running through the GGP partnerships. This includes key agencies such as the Office of Vocational Training and Employment Promotion (OFPPT) in Morocco, State Secretariat for Professional Technical Education (SEETP) in Mozambique, Vocational Education and Training Authority (VETA) in Tanzania, and the Mauritius Qualification Agency (MQA). The Botswana project included partnering with the Department of Skills Development which will support the dissemination and wider uptake of partnership activities in policy activities. Similarly, the Malawi partnership was developed to align with the green TVET ambitions identified in Malawi's Vision 2063 MIP-1 implementation plan, and Green TEVET Policy.

¹⁰ Ibid

¹¹ <https://www.britishcouncil.org/education/skills-employability/programmes/zantchito-skills>

Policy Coherence and Vision – Recommendations

- British Council to host dialogues between UK and global TVET policy makers on green TVET models and policy approaches
- British Council supports national partners in creating forums promoting PPP dialogues supporting the effective development and implementation of green skills policy
- British Council supports national partners in developing monitoring and evaluation frameworks to track progress towards green TVET objectives and KPIs
- British Council provides technical assistance for policy makers capacity to develop and implement effective greening reforms and policy interventions

Labour market intelligence (LMI) and skills anticipation

The seminars included sessions on the application of LMI to develop TVET provision aligned with industry skills demand. The IfATE trailblazer model embeds a central role for employers in defining standards (knowledge, skills and behaviours) for occupations across the UK's key sectors. The developed standards are used to inform the design of apprenticeships and technical education programmes. SDS described how green skills planning is built on LMI aligned with the Scottish Government's Climate Change Plan. This has resulted in the identification of green skills needs and employment opportunities in key sectors for energy transition (oil and gas, on and offshore wind, hydrogen, electricity, carbon capture and storage), construction (retrofitting of housing and non-residential properties), transport (road transport, railways, domestic aviation, shipping and aircraft support vehicles), manufacturing and engineering, and agriculture and land management. The college visits provided insights on institutional approaches to accessing LMI, including through employer dialogues.

The system reviews highlighted impactful examples of LMI and skills anticipation practices. The Moroccan Agency for Energy Efficiency was established to strengthen links between energy sector skills demands and TVET. In Botswana, the Human Resource Development Council (HRDC) manages a Labour Market Observatory (LMO) with a remit to manage a national skills anticipation system. Ghana supports the availability of LMI on green jobs and skills through data accessed from the Ghana Green Jobs Programme and Ghana's Skills Gap Analysis and Audit studies. The British Council, through the follow up TVET system engagement activities, has further partnered with these bodies to identify opportunities to align LMI activities with the development and delivery of greening roadmaps. There are also opportunities to develop agencies capacity to better monitor current and anticipated greening skills needs by introducing international LMI models and platforms such as England's Office for National Statistics (ONS).

Institutional partnerships supported the development of GGP partners' LMI capacity. The Petroc/IFMEREE partnership included dialogues on renewable sector skills needs, including in the areas of Hydrogen transition, fuel cells, and storage skills, renewable batteries, smart housing and sensors, electrolyzers. The Botswana partnership provided knowledge exchange and capacity building opportunities with industry (local farms and their supply chains), and other key stakeholders (NGOs, communities and government) around identifying climate change priorities and skills needs. The Nepal and Malawi partnerships introduced PPP models, through the GCAP and GSAP concepts, for the identification of skills needs. Partnerships included international visits providing insights on LMI models in informing targeted TVET interventions.

Labour market intelligence (LMI) and skills anticipation - Recommendations

- British Council create GGP forums for sharing national LMI models and available green sector/jobs data
- British Council work with partner agencies to create LMI practitioner networking activities including with UK experts
- British Council support partner countries to develop labour market observatories (with green expertise)/single access point for green sector LMI including in consultation with UK experts
- British Council provides technical assistance to develop TVET agencies' capacity to conduct LMI and skills anticipation

Employer engagement

There is an identified need for interventions that promote employers' capacity and enthusiasm to engage in the design and delivery of TVET programmes and to articulate emerging green skills demands. This requires advocacy activities that sensitise employers to the new green economic opportunities and value of TVET/industry partnerships in developing the skill needed to realise them.

The seminars captured examples of TVET/employer partnerships introducing innovative industry practices in the green skilling space. The visit to the Atlantis Special Economic Zone in Cape Town demonstrated the role of the zone in attracting significant Greentech investors including Gestamp Renewable Industries (wind towers), Resolux (wind turbines) Kaytech expansion (geotextiles) and Skyward Windows expansion (double glazing). The Glasgow seminar included a meeting with the Built Environment Smarter Transformation (BE:ST) innovation centre in Glasgow. BE:ST creates an environment through which construction sector employers can interact with education sector stakeholders and policy makers in creating the partnerships, infrastructure, and culture needed to future-proof the commercial

and environmental road forward for the sector. Other visits conducted through the seminars, such as McTaggart Construction (Glasgow) and Warwickshire College Group (Coventry) led to discussions on employer engagement and WBL models in renewable sectors (Construction and Electric Vehicle). The visit to NTAR provided an opportunity for delegates to visit an employer-led modern industry aligned training environment and discuss approaches to WBL/apprenticeships. The seminars also highlighted innovative models for TVET/employer engagement. These include the IfATE's 'trailblazer' groups and the SCQF model that allows employer-based training to be accredited and mapped to a national qualifications framework.

There were recommendations emerging from the system reviews for enhanced PPPs to inform TVET design and delivery. The Botswana study recommended the introduction of sector advisory groups (SAG) in key green sectors e.g. solar and renewable energy, that provide platforms for dialogues between government, TVET providers, and employers. Mozambique highlighted the need to engage employers at national and local level to identify skills needs and priorities and advise on qualification and curriculum development. This engagement could be enhanced through establishing sector skills councils (SSCs) in priority green sectors. The Mozambique study also emphasised the need for enhanced employer engagement to promote the development and delivery of impactful WBL models that develop learners practical and employability skills. Ghana highlighted current PPP models that could be developed to encompass new green sectors, jobs, and skills. This included the extension of WBL/apprenticeship models that have been developed in other sectors to emerging green occupations. The importance of developing PPP forums for the effective implementation of green TVET reforms is aligned with other development programme interventions, including GIZ's Just Transition approach.¹² There was also consensus that the development of PPP forums needed to be accompanied with aligned building of stakeholder capacity to engage through PPPs in the identification of emerging green skills needs.

The Morocco study emphasised that green TVET engagement with the informal sector will have profound environmental, social, and economic benefits by empowering workers and employers through enhanced access to green skills and capacity. This includes through building on learning from current NGO delivered greening activities, for example, interventions in the Moroccan tannery sub-sector have introduced plant-based dyes in place of chemical ones. The report also cites the example of the introduction of solar-powered irrigation pumps which is helping to reduce both farmers' costs and carbon emissions. Botswana echoed the importance of a tailored approach to align with informal sector needs, including in the emerging Photovoltaic (PV) installation and maintenance sector, with one respondent describing the sector as currently reflecting the 'Wild West'.

The contextualisation of the GCAP model to develop GSAPs in both Malawi and Nepal's construction sectors will empower stronger private sector/TVET engagement in green sectors. The Botswana partnership introduced mentoring from UK farming estates and

¹² Skills for a just transition to a greener future, GIZ, 2024 https://www.giz.de/fachexpertise/downloads/27_giz2022-0387en-just-transition-green-future.pdf

training providers to develop capacity to find collaborative solutions in addressing climate change challenges. These interventions were linked to wider national PPPs through sector engagement activities being conducted through the HRDC. Other projects, including the Petroc/IFMEREE collaboration highlighted approaches to using roundtable discussions to embedding employer input into the identification skills needs. Several partnerships have supported the development of employer-led training through sharing approaches to WBL. The Botswana partnership conducted exchanges on innovative ideas for environmentally friendly agricultural practices and improved food production and has also fostered wider engagement with the South African Development community, including through establishing relationships with South African Technical and Vocational Colleges.

Employer Engagement – Recommendations

- British Council continues to utilise partnerships and other GGP interventions to introduce global platforms and partnerships models promoting employer engagement (e.g. GCAP/GSAP)
- British Council conducts interventions to introduce national forums (including model SSC structures) to promote effective TVET sector PPP
- British Council arranges knowledge exchanges and technical assistance to introduce green sector WBL programmes and delivery models
- British Council works with partner countries to develop advocacy activities and shared materials to sensitise employers and providers on green economic opportunities

Curriculum and assessment

Overviews provided by AoC (Coventry) and Colleges Scotland (Glasgow) highlighted how UK further education colleges deliver programmes that have been developed in consultation with employers and in alignment with national strategies and economic priorities. The Gatsby Foundation (Coventry) introduced England's new technical qualifications, T Levels, that are designed and delivered with employers based on industry defined standards. Colleges described the development of programmes aligned with economic opportunities and challenges. This included Forth Valley College's support for the transition of employees from the decommissioned Grangemouth oil refinery. Verdancy Group (Glasgow), a private training provider, specialises in developing short, targeted programmes aimed at meeting specific green skills needs. This includes training aimed at supplementing existing curriculum and upskilling TVET instructors. There was a consensus that the transition to Net Zero often requires targeted (short) green skills courses, that enhance existing 'mainstream' programmes and upskill current workers with the knowledge to work with new materials and/or systems. For example, the Malawi partnership oversaw the introduction of UK green

construction skills bootcamp models and bespoke short courses in areas such as external wall insulation, heat pumps and loft insulation, as well as upskilling on low carbon technologies such as PV's, solar hot water heating, and battery storage. The IMEREE/Petroc partnership allowed for expert exchanges on cutting edge approaches to developing training and skills for the green hydrogen sector and related areas in both Morocco and UK. The impact of the Ghana partnership has seen an enhanced capacity, across all the partners, to better develop and embed curriculum for green technology, renewable energy and green/renewable hydrogen production. This included the joint development of two short courses aimed at priority green jobs. This approach is aligned with the UNESCO-UNEVOC Greening Technical and Vocational Education and Training (2017) recommendation that the transition to a green and sustainable economy requires a dramatic shift in the way jobs are performed through a significant upgrading of existing skills.¹³

The Cape Town seminar included meetings with both TVET and HE providers exploring different approaches to developing curriculum both through mainstream programmes and bespoke courses. Bolland College (Cape Town) introduced innovative approaches to green agriculture sector curriculum development being delivered in collaboration with Stellenbosch University's agri-hub.

There are challenges with the introduction of green standards and skills into mainstream curriculum qualification development. For example, the curricula of the Office for Vocational Training and Work Promotion (OFPPT), Morocco's largest public TVET agency, does not include skills aligned with the greening of trades. Botswana respondents also spoke about the need to address current gaps by mapping green curriculum to national curriculum models and qualification frameworks. Tanzanian stakeholders highlighted challenges with curriculum developers accessing LMI, encouraging stakeholder involvement in curriculum development, and limited resources for curriculum delivery. Mozambique also referenced that existing TVET curriculum is not aligned with the skills required for a green economy, making it is essential to integrate concepts of environmental sustainability, renewable energy, and climate change adaptation informed through the application of LMI.

Moroccan stakeholders recommended a 'phased approach' for the development of green curriculum with an initial focus on high demand 'green' sectors such as renewable energy (solar power, wind energy), and green buildings, which are critical for Morocco's green transition. These sectors have strong growth potential and immediate skills needs that TVET institutions can address to support green economic transition. TVET provision could then be expanded to emerging green sectors such as sustainable agriculture, waste management, fishery, and pharmaceuticals. This phased approach ensures that the TVET curriculum remains responsive to Morocco's evolving green economy, enhancing workforce readiness and employment opportunities, while promoting sustainable practices across diverse industries. The Mauritius partnership included support for the MQA in designing bespoke curriculum framework dedicated to green technology and related programmes aligned with identified workforce challenges and future skills solutions. This was conducted through

¹³ The UNESCO- UNEVOC Greening Technical and Vocational Education and Training: A Practical Guide for Institutions (UNESCO- UNEVOC, 2017) <https://unevoc.unesco.org/up/gtg.pdf>

partnering with MQA in identifying a curriculum framework of existing accredited green technology related programmes. This provided a baseline of provision and the identification of gaps in key discipline and sub-discipline areas from Level 1 to Level 7 (short, intermediate and long programmes). The partnership then made recommendations for the development of new programmes to address the identified gaps.

Curriculum and Assessment – Recommendations

- Policy makers and TVET providers, in consultation with employers, develop industry-led short courses aimed at greening existing 'mainstream' curriculum and delivering training for identified green skills needs and employment opportunities
- Policy makers and TVET providers, in consultation with employers identify specialised curriculum development areas for further partnership and TA interventions e.g. Hydrogen
- Policy makers and TVET providers, in consultation with employers develop national approaches to designing curriculum in consultation with employers and based on sector assessments, LMI, and utilising a phased approach aimed at developing curriculum for priority sectors
- British Council support partners' capacity to design employer led WBL programmes for green sector job roles
- British Council provide opportunities to share approaches to entrepreneurship training as part of green programme development
- Policy makers and TVET providers, in consultation with employers map existing green curriculum to identify gaps for new programme development

Learner engagement and support

The seminars presented approaches to the design and implementation of impactful CIAG including Scotland's Developing Young Workforce (DYW) and England's Gatsby Foundations eight benchmarks for quality CIAG. The Bolland College visit (Cape Town) included meetings with the college's career guidance centre which provided insights on institutional level CIAG activities. These insights were reinforced by meetings with student groups that provided opportunities to understand the impact of different models for learner engagement and support.

Findings from the system reviews highlighted gaps in engaging learners and the wider public on the opportunities of the green economy. This includes issues with the provision of quality CIAG and a lack of targeted efforts to increase public awareness of green economy opportunities. The Tanzania pilot highlighted limited efforts to increase public awareness of the opportunities that green skills offer and low or no support for career guidance staff to

develop the required skills required to promote green employment opportunities. Moroccan respondents cited that career counsellors do not have sufficient information or capacity to effectively orient students and job seekers on green jobs. Botswanan respondents referenced limited support for those giving career guidance in understanding green employment opportunities. HRDC have looked to address this through holding career awareness clinics for prospective learners and meetings to sensitise communities on course offerings. However, there remains the need to enrich these activities with enhanced materials and expertise on employment opportunities in the green economy.

Botswana stakeholders also highlighted the need for public information campaigns (PIC) to challenge negative preconceptions about renewable energy sources and to promote learner awareness of routes into employment in green sectors. Mozambique stakeholders also cited the value of PICs in promoting positive perceptions of green careers. Ghana referenced the role of PICs in mitigating the challenges associated with TVET programmes reaching informal sector employers and workers. Moroccan stakeholders described the need for PICs to change perceptions of TVET with 75% of middle school students and 64% of high school students not viewing vocational training as a pathway for high-achieving students, with even 37% on TVET student themselves sharing this negative perception. The Mauritius partnership promoted public awareness of climate issues and net zero objectives and attracted new entrants and reskilling existing workers for emerging green opportunities.

The partnerships have embedded gender equality and social inclusion (GESI) values supporting a just green economic transition, promoting access to new green jobs and opportunities to all. The IMEREE/Petroc partnership included a defined equality, diversity and inclusion (EDI) approach. This was built on a commitment to sharing best practice on promoting green sector access and inclusion such as Petroc's 'Women in Renewables' programme, sharing of resources and approaches that promote and support inclusion, and ensuring that GESI values are embedded throughout partnership activities. The Mozambique study also highlighted the important role of strong CIAG in addressing gender biases and promoting inclusivity to encourage more women to pursue green sector careers.

Learner Engagement – Recommendations

- British Council supports partners in developing PICs to promote learner engagement with green skills training, including through sharing UK/international examples and materials
- British Council supports the develop CIAG resources and materials to disseminate green job opportunities through sharing UK expertise and examples
- National partners develop CIAG counsellors' capacity to administer advice on green opportunities and employment routes including through workshops etc. developed in consultation with the British Council

- British Council supports activities promoting positive GESI outcomes through targeted learner engagement and support activities by sharing UK and international models and expertise

Institutional strengthening and TVET workforce development

During the seminar in Coventry, Education and Training Foundation described TVET trainer capacity as a key driver for institutional change. In Glasgow, SDS reiterated the importance of green upskilling interventions aimed at both new and existing TVET staff. College visits provided insights on how institutions were strengthened through employer partnerships. For example, the visit to WCG showcased how the college utilised industry partnerships to strengthen its electric vehicle department expertise and resources.

The system reviews identified valuable examples of TVET institutional and workforce capacity building activities. For example, in Morocco, green issues are embedded as part of both initial teacher training and continuing professional development (CPD) programmes. Ghanaian stakeholders referenced the importance of embedding green skills in initial instructor development programmes. There is a need to strengthen TVET staff capacity at all levels to deliver training for a green economic transition; leaders (driving green strategy), facilities (green campus), services (career guidance), administration and instructors (insights on future skill and transversal skill needs). The Mozambique study emphasised the importance of developing TVET capacity to deliver training for the skills required to access new green technologies, such as solar energy, wind power, use of biodigesters and sustainable agriculture. The development of skills for emerging green jobs requires access to updated training infrastructure and resources, requiring an investment in modern labs, workshops, and equipment. The need for a cross-cutting approach to TVET institutional strengthening and workforce development was echoed by a Botswana respondent who described ‘There is a need to “fast track” retooling and up-skilling the trainers and lectures in TVET Colleges on green skills and other future skills.’¹⁴

The Botswana partnership has established a network of sector champions and green action groups within the Brigade (TVET) sector. The Ghana project has overseen training of staff on green skilling materials developed through the partnership, creating a network of green expertise within the participating institutions which acts as a platform for wider TVET sector development activities. The Morocco system study emphasised the importance of building both system and institutional capacity to administer quality assurance models. This includes through introducing global expertise in the development of QA criteria, monitoring systems, and performance metrics.

There is an opportunity to introduce UK approaches to institutional strengthening and workforce development for greening capacity. These include through establishing standards

¹⁴ Developing a Comparative Analysis Tool for Greening TVET Systems. Going Global Partnerships, British Council (2023)

for TVET trainers to integrate sustainability into their teaching, provide free access to high-quality curriculum resources through the National Education Nature Park online hub (England) and provide training opportunities for all staff (teaching, leadership and support) to build their understanding of climate change and sustainability. This could be extended to introducing system strengthening models through examples such as Ofqual and IfATE. The international partner visits to the UK allowed participants to observe best practice and access wider networks, for example, the Malawi partnership included attendance at the UK's National Construction sector event. The Moroccan partnership supported institutional strengthening through the introduction of the PBL model as an extension to current pedagogical approaches to include the role of student voice, enhanced team working, soft-skills, and employer engagement.

There were also examples of the partnerships promoting innovative teacher trainer models, including the example of the Mauritius project which introduced green skills micro-credentials for train the trainer programmes which can then be cascaded nationally to other trainees. The introduction of Cornwall College's Farm Carbon Toolkit in Botswana introduced practical institutional strengthening tools and models.

Institutional Strengthening and Workforce Development – Recommendations

- British Council creates partnerships and forums that target TVET instructor upgrading activities promoting capacity to deliver green skills training
- Policy makers, TVET providers, and employers partner to create industry partnership opportunities that promote TVET college access to green technological resources
- Policy makers develop institutional level QA and MEL frameworks to monitor the quality of green TVET activities and interventions including in alignment with UK/international models
- British Council provides opportunities for global partnerships and peer to peer exchanges to shape institutional strengthening and TVET workforce development.

Financing

The seminars highlighted innovative funding partnerships with employers allowing access to industry relevant equipment and resources. Sessions provided information on funding models, for example, the UK's levy system, which promote stronger employer engagement in TVET. These insights were reinforced through findings from the self-assessment studies which identified innovative TVET financing mechanisms. These included the example of Botswana's training levy managed through the HRDC which has had a positive impact on

employer motivation to conduct training. Stakeholders described opportunities to incentivise companies to use levy funds for skills development for green skills development. Tanzania also has a PPP funded Skills Development Fund. However, similarly to the Botswana levy, there remains a need to target funding allocation to green skills training. Findings from Ghana highlighted the opportunity to utilise the \$60M allocation from the Ghana Skills Development Fund to support TVET capacity to deliver green skills.

Findings of the Greening TVET self-assessments highlight the importance of incentivising and capacitating TVET providers to offer training courses that require expensive equipment promoting skilled labour flow into new green sectors. There was consensus on the opportunity to introduce innovative funding models utilising PPPs. This could include accessing investment in updated training infrastructure needed for the development of green skills. Botswana and Mozambique stakeholders also highlighted the importance of sufficient TVET funding that was strategically aligned to greening policy objectives and associated resource needs. There is an opportunity to further develop and disseminate innovative TVET/industry partnerships that promote funding opportunities for green skill delivery. This includes through observations gained from the GGP seminars on how TVET providers establish commercial linkages with employers to sponsor programmes and resources.

Financing – Recommendations

- Policy makers, TVET providers, and employers partner to develop and disseminate innovative TVET/industry partnerships that promote funding opportunities for green skill delivery, including through commercial arrangements
- British Council collect and disseminate information and dialogues on TVET funding models e.g. levy, Skills Development Fund (SDF) and hold dissemination events
- British Council promotes opportunities to link greening of TVET activities with wider development interventions and funding opportunities

6. Conclusion

This report highlights the important strategic role played by the British Council in building global TVET sector's capacity to meet the shared challenges of climate change through facilitating knowledge exchange, system reforms, and institutional partnerships. Knowledge exchange activities have informed and inspired global networks committed to the positive realisation of shared green TVET objectives. Dialogues have developed stakeholders' capacity to introduce impactful TVET reforms that reinforce the sector's core role in delivering positive green economic transition and national net zero strategies.

Global green TVET capacity has been further developed through innovative planning tools that allow partners to self-assess the impact of their own current green interventions, whilst generating data to inform targeted planning aligned with core themes from across the TVET spectrum. The British Council's greening self-assessment activities have provided platforms for TVET sector reform planning in Botswana, Ghana, Morocco, Mozambique and Tanzania, creating shared national greening TVET roadmaps and national forums for exchanges on TVET reforms. The application of the British Council's tools and interventions have promoted a more nuanced understanding of priorities, roles and responsibilities across key thematic areas. This approach has ensured that greening strategies haven been jointly developed and owned by stakeholders. The collaborative and detailed approach being delivered through the British Council's system reform activities will leave a sustainable legacy on partner countries' green TVET reform agendas.

Institutional partnerships have established strong peer-to-peer global relationships working towards shared responses to common challenges. Interventions delivered through the partnerships have reinforced global TVET system capacity, commitment and expertise in developing skills for a greener future. The partnerships have provided opportunities for cross-country learning in core green TVET areas including the development of curriculum and assessment, PPP, LMI, and policy. The cross-country learning opportunities created by the British Council will leave an important legacy for the development of skills for a greener future.