

Going Global Partnerships

Mauritius: Greening TVET Self-Assessment Report

10 September 2025

Contents

Executive Summary	5
Table 1: Headline Summary of Self-Assessment Outcomes	6
Recommendations	9
Table 2: Recommendations from the self-assessment process.....	9
Recommendations on next steps	11
Table 3: Recommendations on Next Steps.....	11
A Roadmap for Greening TVET in Mauritius	12
Diagram 1. Roadmap : 8 Stages.....	12
Table 4: Roadmap for greening TVET	13
1. Introduction	14
Acknowledgement.....	14
Project structure.....	15
Background on Mauritius	15
Green Economy and Skills Development.....	16
Education and TVET in Mauritius	18
The Greening TVET Self-Assessment model	19
Workshop and stakeholder engagement in Mauritius	20
2. Analysis of Survey Tool Data and Workshop Insights.....	20
Table 5: Headline Summary of Workshop Insights	20
3. Detailed Findings	23
Summary of Collective and Individual Responses.....	23
Table 6: Summary of Collective and Individual Responses from Mauritius Green Skills Benchmarking Workshop.....	23
Theme 1: Policy Coherence.....	24
Table 7: Summary of Policy Coherence Responses.....	25
Participant comments	25
Theme 2: Labour Market Intelligence and Skills Anticipation	26
Table 8: Summary of LMI Responses.....	27
Participant Comments.....	27
Theme 3: Employer Engagement	28
Table 9: Employer Engagement	28
Participant comments	29

Theme 4: Curriculum and Assessment	29
Table 10: Curriculum and Assessment	30
Participant Comments.....	31
Theme 5: Learner Engagement and Support.....	31
Table 11. Learner Engagement and Support.....	32
Participants Comments.....	33
Theme 6: Institutional Strengthening	33
Table 12: Institutional Strengthening.....	34
Participants Comments.....	34
Theme 7: Financing	35
Table 13: Financing	36
Participant Comments.....	36
4. Summary of Strengths, Gaps and Opportunities	37
Strengths.....	37
Gaps and Challenges	37
Support Needed	38
Biggest “Asks”	39
5. Conclusions and Recommendations.....	40
Policy.....	40
Policy Recommendations	41
Labour Market Intelligence LMI	41
LMI Recommendations	41
Employer Engagement.....	42
Employer Engagement Recommendation	42
Enhance Public Engagement and Education	42
Curriculum and Assessment.....	42
Curriculum Recommendations.....	42
Learner Engagement and Support	43
Learner Engagement Recommendation	43
Institutional strengthening and TVET Workforce Development.	43
Institutional Strengthening Recommendations.....	43
Financing.....	43
Financing Recommendation	44
Feedback from Key National Partners.....	44

Ministry of Environment, Solid Waste Management and Climate Change	44
Ministry of Tertiary Education, Science and Research.....	45
Higher Education Commission.....	45
Closing Note	46
Annexes	47
Annex 1. Glossary	47
Green transformation (green transition)	47
References from glossary	50
Annex 2. Agenda for the Workshop on Green Skills Benchmarking in Mauritius: 20 February 2025. The Ravenala Attitude Hotel, Balaclava, Mauritius.....	51
Annex 3: Workshop Participants: 20 February 2025	52
Annex 4 : A Roadmap for Greening TVET in Mauritius.	54
Policy, Commitment and National Leadership	54
Planning for Future Jobs.....	55
Skills Hotspot and Competence Analysis.....	56
Responsive Qualification and Curriculum Development	56
Employer Engagement /Partnerships	57
Institutional Capacity Building	57
Quality Delivery.....	58
Monitoring /Feedback /Evaluation.....	58

Executive Summary

The British Council has developed a self-assessment tool on Greening TVET that aims to identify and measure the progress, gaps and opportunities to further develop a country's TVET system at both the policy and implementation level in support of green skills development. The workshop-based process that has been adopted in Mauritius is designed to synthesise the views of key stakeholders on this important issue and make appropriate recommendations. The approach is designed to support government in demonstrating and measuring progress in the transition to a greener economy and society, will inform the enhancement and formulation of appropriate TVET policy and support the practical implementation of green skills development through the TVET system.

The greening TVET self-assessment exercise was conducted in Mauritius in February 2025. This included consultations with key actors and TVET stakeholders, an interactive workshop on 20 February and further visits to training providers. This provided leading policy makers, training providers, donors and other key stakeholders an opportunity to express their views about progress in developing and implementing TVET policy in support of the transition to a green economy.

This report sets out the self-assessment process that was adopted and provides a summary of the findings and recommendations. Table 1 provides a headline summary, highlighting the main strengths of the current approach to green skills development in Mauritius and the most significant gaps and opportunities for development. Table 2 sets out 13 recommendations to further develop the TVET system to support green skills development. Table 3 sets out suggested next steps.

It was clear from the interviews and workshop, that the new government has set out clear and ambitious goals to move Mauritius towards a low carbon economy, adopting circular economy practices, moving to 60% renewables by 2030 and seeking to “green” each major sector of the economy. The Government Programme 2025-2030 has “fostering sustainability” at the heart of the government's ambition. There have been a series of reports and action in recent years that demonstrate commitment, including:

An Environment Master Plan (2020-2030) for the Republic of Mauritius. This has 8 thematic areas, each with a 10-year Policy and Strategy, and a 5-year Action Plan,

Greening of the public sector. An Action Plan, a Green Charter, and an institutional mechanism, approved by Government in March 2023,

A Roadmap and Action Plan for a Circular Economy in the Republic of Mauritius (2023-2033). This Roadmap aims to serve as the strategic tool to support the transition from a linear economy to a circular and resilient economy. It includes 80 actions for Mauritius, and 30 actions for Rodrigues, to mainstream circularity in 5 priority focus areas plus 6 cross-cutting measures, including Education and Awareness Raising.

A new legislative framework- Environment Act (July 2024), including a greening of the public sector action plan.

There was a general sense at the workshop and from interviews that while the policy position is strong and significant initiatives are underway, including skills to support the “blue” economy,

stakeholders identified opportunities to enhance coherence and long-term strategic alignment, where a more dynamic TVET system drives the development of the green skills at the quality and scale that will be essential for economic transformation.

Issues highlighted included the availability of data on jobs and skills, the design and speed of change of the curriculum, the level of engagement between the public and the private sector and the need to build capacity and infrastructure to drive change at the scale and speed required. Concerns were also raised about incentives for industry to invest in green skills and the removal of hurdles that may be slowing down change. Stakeholders also worried about a “brain drain” of talented people leaving Mauritius and a lack of professional skills in sustainability to drive change at the pace needed.

Table 1: Headline Summary of Self-Assessment Outcomes

Headline Summary		
Findings by Theme	Strengths	Gaps/ Opportunities for Development
Policy Coherence	Commitment of government to green transition and policies Institutional infrastructure in place Lots of initiatives in place and some good practice already achieved	Concerns about policy coherence and speed of policy implementation Need a clear roadmap and longer-term vision for TVET development to support green transition. Lack of collaboration/consultation with industry and need to strengthen partnership working
Labour Market Information	A broad understanding of green transition impacts is in place drawing data from a wide range of sources	National skills survey delayed by procurement issues. A detailed skills analysis is needed for each economic sector, with active employer involvement, to provide the platform for TVET interventions
Employer Engagement	Employers already involved on MITD Board and committees.	Scope for greater involvement with key industry sectors affected by green transition.

	<p>St Gabriel's school and Polytechnics Mauritius praised for their responsiveness to industry needs</p>	<p>Smaller firms less well engaged.</p> <p>Large companies sending employees abroad for training. Risk of "brain drain".</p> <p>Need for greater collaboration with industry on skills needs and delivery plans.</p> <p>Training institutions need the autonomy and flexibility to meet industry needs</p>
Curriculum	<p>Some new green skills curricula in place including a 10-hour sustainability module and curricula for specific skills areas.</p> <p>Collaboration between MITD and Canada on green curricula development</p> <p>British Council funded International Skills Partnership on micro-credentials in green technology successfully completed in April 2025 with 5 Mauritian partners</p>	<p>Challenge of aligning curriculum with rapidly changing skills needs.</p> <p>Curriculum review cycle time too long and curricula lack flexibility to adapt incrementally. Too many layers of approval.</p> <p>British Council funded curriculum development project with previous Gov't was successful, a second-phase proposal was developed, and we are well positioned to support on this pending engagement with new Gov't</p>
Learner Engagement and Support	<p>Public awareness and careers fairs take place.</p> <p>NGOs run sessions in schools on climate change and environmental issues.</p> <p>Work placements are available</p>	<p>Public awareness remains low on the benefits of TVET and the importance of green skills. There remains a degree of stigma about TVET.</p> <p>Careers guidance materials and processes are not yet sufficiently engaging green skills.</p>

		They may be some resistance by trainers to adopting green skills.
Institutional strengthening/ TVET Workforce Development	<p>International collaboration with the UK and other countries on trainer training and TVET institutional development</p> <p>Some training of in-service workers in green energy skills following trainer training.</p>	<p>A lack of trained trainers</p> <p>A need for systematic CPD for trainers to keep them up to date.</p> <p>A report mechanism to measure the efficiency and effectiveness of TVET</p> <p>Systematic capacity building and funds for institutional development</p> <p>Institutional leadership and autonomy to enable more responsive engagement with employers.</p>
Financing	<p>There are a number of funding sources from government and donor organisations.</p> <p>Training is free in Mauritius including government funded TVET programmes, the youth employment programme and traineeships.</p> <p>MITD and Polytechnics Mauritius are funded by government.</p> <p>There is a skills development fund funded through a skills levy.</p> <p>Research and innovation funding is also in place.</p> <p>Employers make in-kind contributions and in house training.</p>	<p>Funding should be realigned to build TVET capacity, support organisational change and the growth of green skills.</p> <p>There needs to be investment in modernising and speeding up curriculum development.</p> <p>Clarify how different aspects of TVET are financed and how costs are shared with industry.</p> <p>Actively support small firms and incentivise their investment in skills.</p>

Recommendations

The recommendations in this report are separated into two parts, those that have emerged from the self-assessment process and those setting out possible next steps in carrying forward this work. There are 15 main recommendations from the self-assessment process, summarised at Table 2 below. These are organised by section of the self-assessment tool. The recommendations reflect the opinion of participants at the workshop, not necessarily those of the British Council.

Table 2: Recommendations from the self-assessment process

Section of the self-assessment	Recommendations from self-assessment process
Policy	1. Establish a Permanent Green Economy Advisory Council to support a whole system approach to development ¹ This body to be tasked with advising on policy, investment, and innovation, building system capacity, accelerating curriculum and qualifications reform, and strengthening private sector engagement. It should include representatives from government, business, academia, and civil society.
	2. Focus on Implementation and delivery. Stakeholders are seeking more support in turning policy intent into effective action on the ground in terms of effective TVET delivery of relevant skills to support economic growth and green transition.
	3. Leverage Existing Structures. Align with the National Steering Committee under PAGE ² and build on PAGE outputs such as the skills roadmap.
	4. Strengthen training for civil servants and professionals to support government to have the digital tools and systems to modernise their practice, speed decision making and create the conditions for TVET system success.
	5. Focus on Skills Implementation for Strategic Sectors. Strengthen the link between TVET institutions and employers in strategic industrial sectors to ensure the supply of future focussed skills to support green transition.

¹ To note that the UK government has a Green Economy Council and has also launched a new Apex skills body called Skills England in 2025 tasked with similar responsibilities to those recommended here, although with a wider remit to meet the 5 missions of the new government, including economic growth as well as addressing green energy issues.

² The UN Partnership for Action on the Green Economy. Mauritius joined in 2014 and is now a graduate member. Included a Green Economy assessment of 6 economic sectors in 2015, supported the government's 2017-20 strategic plan, a 2018 learning needs assessment, a 2019 sustainability strategy and the 2020-24 National Programme "Towards an Inclusive, High Income and Greener Mauritius. In 2020 capacity building workshops and trainer training and in 2021 the National Steering Committee was launched. In 2023 a Skills Roadmap for a Green Economy workshop took place to validate a number of key reports on skills for greening the economy.

Labour Market Intelligence (LMI)	6. A Skills Roadmap should be developed for key economic sectors , (blue economy, renewable energy, sustainable tourism, and green finance), led by employers and brought together through a Green Skills Working Group, to provide a single coherent voice back to government on skills needs.
	7. Accelerate the national skills survey procurement process to ensure high quality intelligence on jobs and skills is available to all stakeholders in Mauritius.
Employer engagement	8. Encourage public-private partnerships in strategic sectors , including a high-level consultation group with leading industry figures and training institute leaders to plan the implementation of green skills development in strategic sectors and sustain policy dialogue and consultation on TVET.
Enhance Public Engagement and Education.	
Curriculum and Assessment	9. Integrate green economy issues and skills more effectively into the curriculum. Create green skills centres of excellence for priority sectors of the economy, (e.g. renewable energy, EV maintenance, marine and construction), building on the best of existing TVET provision, with the employer engagement, autonomy, and financial stability to drive scale and impact.
	10. Accelerate approval processes for qualifications and curriculum so that they can more quickly reflect rapidly changing skills needs.
	11. Build a degree of flexibility into future curriculum design , to allow qualifications and training institutions to rapidly adapt provision to meet changing needs without having to seek national approval. Short courses and micro-credentials may also provide a useful way forward for updating the existing workforce.
Learner Engagement	12. Launch a public awareness and careers campaign. Provide support to update careers staff on green skills opportunities
Institutional Strengthening	13. Extend and enhance international collaboration using the British Council or similar model, to develop trainer trainers in each key economic sector that can then build a substantial pool of teachers and trainers with expertise in green skills and improve collaboration between TVET institutions in Mauritius.
Financing	14. Promote Green Financing and Innovation. Expanding access to green finance, including a planned programme of capital investment to enhance TVET institutional capacity and provide infrastructure and facilities to deliver green skills and support circular economy models.

- | | |
|--|---|
| | <p>15. A detailed review of sources and application of funds to TVET and how more substantial resources could be provided for green skills development, including through improved coordination of donor agency support.</p> |
|--|---|

Recommendations on next steps

These are set out in table 3 below.

Table 3: Recommendations on Next Steps

Recommendations on next steps
1. This report should form the basis for discussion with the Government of Mauritius about the opportunities to further strengthen the implementation of green skills in the TVET system and the help that could be offered by the British Council to continue to move this work forward.
2. Dialogue with government should use the self-assessment findings to explore the challenges faced by Mauritius in turning policy into action and agree steps to strengthen implementation of policy, enhance employer engagement, deepen the green skills curricula to address the specific skills needs of priority sectors, increase industry placements, strengthen training institute capacity, and identify sources of sustainable funding to accelerate and support change.
3. Following discussion with government and dialogue with stakeholders, the self-assessment findings and detailed list of recommendations will need to be prioritised into an action plan.
4. The work with Cardiff and Vale College and the visit to Scotland were praised by many stakeholders. This approach should be amplified if possible as it is opening eyes to what needs to be done to address TVET development in the context of green transition.
5. Information on progress and challenges in the UK and internationally should be valuable in informing TVET development in Mauritius. The roadmap provided in this report draws on UK experience and offers a possible basis for the whole-systems approach set out at recommendation 1
6. The final version of the report should be circulated to all stakeholders who were interviewed or attended the workshop.

A Roadmap for Greening TVET in Mauritius

The roadmap set out here is designed to support development of green skills within a strengthened TVET system in Mauritius. It reflects current experience in supporting effective TVET in the UK and is built on three main principles:

1. **Business Relevance** – the ability of the TVET system to keep pace with the speed of industrial change, and deliver up-to-date training,
2. **Agility and Responsiveness** – the ability of TVET institutions to quickly flex their offer to meet the specific needs of each industry and business,
3. **Credibility**– in terms of the structure, capacity, and capability of each TVET institution to deliver industry standard training of high quality.

The roadmap has eight stages as set out in the diagram below. Each stage is described in detail at Annex 4.

Diagram 1. Roadmap : 8 Stages



The key points to consider under each of these points on the roadmap are in Table 4 below.

Table 4: Roadmap for greening TVET

Stage	A Roadmap for Greening TVET Key points to consider
Policy, Commitment and National Leadership	<p>Build Alliances and Partnerships, sharing knowledge, resources, and best practice. Collaboration is essential to face complex challenges such as climate change,</p> <p>Create Sustainable Financing to support long-term transition to a green economy,</p> <p>Clarify Industrial Strategy: building a clear and holistic cross government strategy to identify and prioritise the industry sectors that will lead the transition to a low carbon economy.</p>
LMI and Planning for Future Jobs	<p>Collaborate with stakeholders on job vacancies, skills demand, and emerging trends,</p> <p>Create comprehensive data collection, regular surveys, quality assured, validated and widely disseminated, including for careers advice. Specific reports for different industries and occupations.</p>
Skills Hotspots and Competence analysis	<p>Establish skills bodies led by employers in each key economic sector, to provide occupational maps, “hotspot” skills gap analysis and identify routes to competence.</p>
Qualifications and Curriculum development	<p>Improve responsiveness of qualification and curriculum development: Building a more agile and responsive qualification and curriculum development process,</p>
Employer Engagement /Partnerships	<p>Employers need to be fully engaged at national and local level in highlighting skills needs and priorities and advising on qualification and curriculum development. Sector skills bodies should help support National reform by providing a coherent employer voice from each industry. TVET Institutions should reach out to employers at the local level, build partnerships and have the flexibility to adapt provision to meet specific business needs.</p>

Institutional Capacity Building	TVET institutions need to carry credibility with the business community and be recognised by parents and students as places that deliver high quality learning. Important factors are; leadership and autonomy, supporting highly motivated and committed staff, building long term relationships with key stakeholders, training staff to provide high quality learning and developing facilities to replicate industrial practice and creating specialist institutions for higher skills development.
Quality delivery	Quality focussed, supported by regular external inspection focussed on the quality of teaching and learning at TVET Institutions.
Monitoring, Feedback and Evaluation	The effectiveness of the TVET system and its adoption of green skills needs to be carefully tracked, monitored and evaluated over time, so that judgements can be made about efficiency and effectiveness, social impact on learners and communities and impact on business and the economy.

1. Introduction

This is a report and analysis of the findings of Greening TVET Benchmarking Workshops in Mauritius. The workshops used the British Council Greening TVET Self-Assessment Tool to outline the strengths and opportunities for greening Technical and Vocational Education and Training (TVET). This report uses these findings to identify the steps Mauritius could take to enhance its TVET system in support of the transition to a low carbon economy. The report is also intended to inform the British Council in its design of future programmes.

The British Council has substantial previous experience of working with the government of Mauritius on TVET issues, most notably through a “seeing is believing” visit for senior officials to Scotland as part of the British Council’s UK Policy Seminar February 2025 and the development of collaborative partnerships between key training institutions (including MITD and St Gabriel’s TVET school) with Cardiff and Vale College in Wales. The success of these initiatives led to proposals for a more in-depth review of progress on the development of green (and blue) skills through the TVET system, using a self-assessment tool developed and previously tested by the British Council in a number of other countries including Botswana, Tanzania, Morocco and Mozambique.

Acknowledgement

While the workshops, interviews and report were led by Simon Perryman, Naweid Fakeermahamood, Ellie Utterson and the wider British Council team in Mauritius provided invaluable support to the project. The team are hugely grateful to all who took time to be

interviewed or attended the workshop. Their insight and expertise is the vital component in creating a successful self-assessment process.

Project structure

The programme was designed to bring together senior people from government, business, civil society and the TVET sector to form a consensus on the progress and good practice already achieved in greening the TVET system and the further steps needed for TVET to effectively support the successful transition to a low carbon economy.

Background on Mauritius

Mauritius is described by their High Commission in London³ as a stable and prosperous Indian Ocean archipelago. It was initially inhabited in 1638 by the Dutch⁴ and named after Prince Maurits of Nassau but abandoned in 1710 leaving a legacy of slavery and the extinction of the Dodo. The French established a successful settlement in 1722, based on sugar cane, using slave labour from other parts of Africa. Britain captured the island in 1810 but kept much of the French administrative structure and use of the French Creole language. Slavery was abolished in 1835, leading to greater reliance on Indian contracted labour to work on plantations. Today the descendants of these groups have created a multi-cultural society. Mauritius gained independence from the UK in 1968 as a Parliamentary Republic and has remained a stable democracy with a positive human rights record.

Since independence, Mauritius has developed from a low-income, agriculturally based economy to a higher middle-income diversified economy with growing industrial, financial, and tourist sectors. For most of the period, annual growth has been in the order of 5% to 6%. This has been reflected in more equitable income distribution, increased life expectancy, lowered infant mortality, and a much-improved infrastructure. The economy rests on sugar, tourism, textiles and apparel, and financial services, and is expanding into fish processing, information and communications technology, and hospitality and property development.⁵

The country has attracted considerable foreign investment and now has one of Africa's highest per capita incomes of \$26,600. It has a GDP of \$33.532 billion, about 70% of which is generated by the service sector.

Mauritius has a population of 1.2 million and is one of the most densely populated countries in the world. It has a labour force of 594,000, an unemployment rate of 6% (2023) and a youth unemployment rate of 20.9% (2023). Education expenditure is 4.9% of GDP.

3 Mauritian High Commission London, <https://mauritius-london.govmu.org/Pages/Mauritius-London/General-Information-about-the-Republic-of-Mauritius.aspx>

4 CIA Factbook, <https://www.cia.gov/the-world-factbook/countries/mauritius/>

5 Mauritian High Commission London, <https://mauritius-london.govmu.org/Pages/Mauritius-London/General-Information-about-the-Republic-of-Mauritius.aspx>

The World Bank's most recent Systematic Country Diagnostic study⁶ describes Mauritius as "one of the World's most inspiring development success stories" and claims "it would be a high-income country today had it not been for the impact of Covid 19." It argues that diversification has brought employment and shared wealth that has pulled people out of poverty and created a substantial middle class, but that structural challenges remain that require new solutions. Seven priorities are highlighted including two relating to education, "raising the quality and availability of skills while reducing inequity of outcomes and boosting quality". Other priorities are focussed on strengthening private sector innovation through digitalisation, raising public sector efficiency, improving social protection and labour market entry, and addressing climate change, both through mitigation measures and exploring opportunities for green growth.

Green Economy and Skills Development

The new government, elected in 2024 has set out a strategic agenda, "Towards an Inclusive, High Income and Green Mauritius, Forging Ahead Together".

According to the OECD⁷, climate change significantly impacts Mauritius, affecting its environment, economy, and society. Adapting to and mitigating climate change are top priorities for the government, which is committed to developing strategic measures for a sustainable, climate-resilient, low-emission, and circular economy. The country is party to a wide range of international environmental agreements including:

Antarctic-Marine Living Resources Conservation Act (1981), the Convention of Biological Diversity CBD (1982), the Climate Change-Kyoto Protocol (1997) and the Climate Change-Paris Agreement (2015). The government has an ambition to reduce carbon emissions by 60% by 2030, which will be challenging given that there is currently about 80% reliance on fossil fuels for power generation, although recent innovation by Omnicane has seen growth of biomass through the processing of the waste product of sugar cane production and growing interest in wind and solar.

There are a wide range of environmental initiatives and those to encourage the development of a circular economy, including support from the EU to recycle construction waste, and incentives to promote solar, electric vehicles and remove plastic bottles from the economy.

There have also been a number of important studies to help shape a low carbon future. These include:

- **An Environment Master Plan (2020-2030) for the Republic of Mauritius.** This Masterplan has 8 thematic areas, each of which has a 10-year Policy and Strategy as well as a 5-year Action Plan,
- **Greening of the Public Sector.** An Action Plan, a Green Charter and an Institutional Mechanism have been developed and were approved by Government in 2023,
- **Roadmap and Action Plan for a Circular Economy in the Republic of Mauritius (2023-2033).** This Roadmap has as objective to serve as the strategic tool to support the transition from a linear economy to a circular and resilient economy. The Roadmap includes 80 actions for Mauritius and 30 actions for Rodrigues to mainstream circularity in

6 World Bank: <https://documents1.worldbank.org/curated/en/866371646406360210/pdf/Mauritius-Systematic-Country-Diagnostic-Update.pdf>

7 OECD Mauritius Country Programme, <https://www.oecd.org/en/about/programmes/mauritius-country-programme.html>

5 priority focus areas. There are also 6 cross-cutting measures including: Governance; Education and Awareness Raising. The Ministry of Education chairs a dedicated technical committee on the education measure and sits on the wider Steering Committee on the Circular Economy.

- **New legislative framework- Environment Act** July 2024: Action plan for greening the public sector.

Moving to a green and climate-resilient economy requires a dramatic shift in the existing skills of the workforce. According to *Greening Technical and Vocational Education and Training: A Practical Guide for Institutions* (UNESCO-UNEVOC, 2017), this shift requires changes in the way jobs are performed, including both the development of skills to equip people to work in new climate-friendly occupations and the greening of existing jobs.

According to the International Labour Organization (ILO)⁸ and the UN Environment Programme (UNEP) (2012), eight economic sectors will play a central role in the transition to a green economy: agriculture, forestry, fishing, energy, resource-intensive manufacturing, recycling, building and transport. They argue that transforming work in these sectors should play a major part in enabling the achievement of the Sustainable Development Goals (SDGs), especially in the eradication of poverty through social inclusion. Mauritius has adopted these sectors within its own plans for green transition.

The *Education for Sustainable Development Strategic Framework for Sub Saharan Africa 2022-2030*⁹ recommends 5 strategic directions to strengthen Education for Sustainable Development ESD:

- **Policy Advancement:** ESD must be integrated into global, regional, national, and local policies related to education and sustainable development.
- **Capacity Building** , Training and Professional Development: Focus on empowering educators with the knowledge, skills, values and attitudes needed for the transition to sustainability. Build a whole-institution approach to education and training,
- **Partnerships**, Networks, Youth and Community Engagement and Action,
- **Research**, Monitoring and Evaluation,
- **21st Century Skills, Jobs, and Sustainable Economy:** including to reorient vocational schools' curricula to ensure they respond to the demand for a workforce capable of operating well in a modern, skilled economy and integrate ESD in TVET to stimulate new ways of thinking and innovative responses to sustainable development, low-carbon green practices, poverty reduction and support for socio-economic development.

⁸ Working Towards Sustainable Development: Opportunities for Decent work and Social Inclusion in a Green Economy, ILO 2012, https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_181836.pdf

⁹ The Education for Sustainable Development (ESD) Regional Strategic Framework for Sub-Saharan Africa (2022-2030) aims to integrate sustainability principles into education systems across the region. This framework supports the global "ESD for 2030" initiative and aligns with the Sustainable Development Goals (SDGs), particularly SDG 4 (quality education).

Education and TVET in Mauritius

The education system in Mauritius follows the UK model to some extent, with primary, secondary and tertiary phases and is compulsory until age 16. Cambridge “O” levels are taken to gain a School Certificate at 16 and “A” levels to gain a Higher School Certificate at 18. This leads to higher education at the University of Mauritius, University of Technology, or overseas. TVET is available for those who are unsuccessful at passing the Certificate of Primary Education. It is structured into vocational National Certificate Level 1-5 and Diploma L6 programmes with progression routes to higher education.

The principle TVET delivery institutions are:

- MITD, has 9000 students, providing L2-6 programmes through 19 general and more specialist centres including in hospitality and tourism, IT and electronics, engineering and heavy vehicle driving. MITD support apprenticeships and classroom-based programmes for young people, adults, and unemployed people. All courses now have a 10-hour sustainability awareness module, and new courses are being developed on solar energy, auditing climate change impacts etc.
- Polytechnics Mauritius, established in 2018, provides 50 higher level TVET programmes in 6 clusters, for school leavers at 16 (80%) and to support upskilling of adults (20%). They have 5,500 students at 7 campuses and claim a 98% placement rate in jobs. They describe themselves as an organisation with deep private sector involvement, smart systems, progressive pedagogy and a forward-thinking approach including on climate change and green skills,
- St Gabriel’s TVET School supports learners from lower-income households who face challenges in mainstream education. They provide a 1-year preparatory programme, then 2 years to A Level or a technical qualification, mainly in STEM subjects. They are currently expanding to 1200 places a year, with a new campus under development.

At the national level, the system is overseen by the Ministry of Education and the Ministry of Tertiary Education. The Ministry of the Environment and Climate Change also has a strong interest in the skills required to support greening of the economy and in implementation of the TVET component in the Circular Economy Roadmap. They are supported by the Mauritius Qualifications Authority MQA and the Human Resource Development Council HRDC.

- HRDC looks after and promotes the development of the labour force in Mauritius, manages the National Training Fund and levy/grant system and runs a range of national programmes. It developed the National Skills Development Strategy NSDS, 2022-2026, to improve the efficiency and effectiveness of the skills system, tackle skills imbalances and prepare young people for the future.
- MQA manages standards and qualifications development, the national qualification framework and the approval and registration of training institutions. MQA describe the development of a more demand-based qualification development model using sector based Industrial Training Advisory Committees. They have received advice from New Zealand on green skills, including proposals to use an “adopt and adapt” approach drawing on existing internationally relevant standards. They recognise the current 5-year qualifications review cycle is too long and are moving to give Awarding Bodies greater freedom to develop their own qualifications.

The new Government Programme for Mauritius, 2025-29, has set out a number of TVET reforms including a strong focus on climate change. It includes the following statements:

- “A Skills Master Plan for the economy will be developed, jointly with stakeholders, to identify the core competencies required to support the emerging technology-driven economy”.
- “Regular national and sectoral skills studies will be carried out by the Human Resource Development Council. The education, skilling and training systems will be reengineered with a focus on better preparing our youth for the world of work”.
- “The Government’s aim is to make education inclusive again. The current education system drops out too many children from the mainstream education. Too few children make it to tertiary education. These flaws are the source of social injustice”.
- “Government is committed to creating inclusive and dynamic pathways from Technical and Vocational Education and Training to higher education while advancing technical education to meet industry demands”.

The Greening TVET Self-Assessment model

The British Council commissioned a research project in 2023 to explore:

- What does a model TVET system that supports transition to a green/blue economy look like? What attributes should be considered?
- How can we assess the extent to which a TVET system supports transition to a green/ blue economy, considering the limited availability of data and other evidence in many countries?
- What examples exist in countries that illustrate how they are enhancing, or plan to enhance, their TVET systems to ensure they support transition to a green/blue economy and deliver TVET more sustainably?
- What can each country do to enhance their TVET systems to ensure they support transition to a green/blue economy and deliver TVET more sustainably?

The project involved a five-stage approach to develop a Greening TVET assessment tool and its piloting in three countries, Botswana, Tanzania, and Morocco. A tool comprising 80 questions was developed to explore the readiness of a country’s TVET system to deliver green skills, against eight broad themes:

- Policy coherence.
- Labour market intelligence and skills anticipation.
- Employer engagement.
- Curriculum and assessment.
- Learner engagement and support.
- Institutional strengthening and the TVET workforce.
- Financing.
- Quality assurance, monitoring, and evaluation

The Tool is primarily quantitatively based, with respondents asked to make “Yes”, “No” or “*To some Extent*” responses to the majority of questions. There are also a number of freeform responses requesting information on good practice, gaps and opportunities.

Results from the survey were analysed to identify strengths, challenges, priority areas for development and recommendations. Findings were then validated with stakeholders through online interactive workshops.

Following feedback from this pilot, the Self-Assessment Tool was slightly reduced in length and Quality Assurance was removed as a separate theme. It was used in this revised form, with 7 themes, for a benchmarking project in Mozambique prior to this project in Mauritius.

Workshop and stakeholder engagement in Mauritius

To maximise the effectiveness and reach of the self-assessment process in Mauritius, it was agreed that the consultant would hold individual discussions with key stakeholders ahead of a whole-day workshop on 20 February 2025, bringing together senior leaders from government, industry, and civil society. Participant details are at annex 3.

The outcomes of the individual meetings and workshop responses were drawn together into an overall analysis table of comments and data relating to each section of the tool. These are summarised in the following sections of the report.

2. Analysis of Survey Tool Data and Workshop Insights

This section of the report provides a detailed analysis of the data emerging from the use of the Greening TVET tool and the insights that have emerged from discussion with key stakeholders. A summary of the main insights is at Table 5.

This is followed by more detailed workshop findings, including a detailed analysis for each of the 7 benchmarking themes, including collective comments from each of the 5 tables at the workshop and individual responses from 14 workshop participants.

A summary of strengths, opportunities and gaps follows, together with a summary of actions, changes and support participants felt were needed to fully realise the ambition to embed green skills in the TVET system.

Table 5: Headline Summary of Workshop Insights

Headline Summary		
Findings by Theme	Strengths	Gaps/ Opportunities for Development
Policy Coherence	<ul style="list-style-type: none">Commitment of government to green transition and policies	<ul style="list-style-type: none">Concerns about policy coherence and speed of policy implementation

	<ul style="list-style-type: none"> • Institutional infrastructure in place • Lots of initiatives in place and some good practice already achieved 	<ul style="list-style-type: none"> • Need a clear roadmap and longer-term vision for TVET development to support green transition. • Lack of collaboration/consultation with industry and need to strengthen partnership working
LMI	<ul style="list-style-type: none"> • A broad understanding of green transition impacts is in place drawing data from a wide range of sources 	<ul style="list-style-type: none"> • National skills survey delayed by procurement issues. • A detailed skills analysis is needed for each economic sector, with active employer involvement, to provide the platform for TVET interventions
Employer Engagement	<ul style="list-style-type: none"> • Employers already involved on MITD Board and committees. • St Gabriel's school and Polytechnics Mauritius praised for their responsiveness to industry needs 	<ul style="list-style-type: none"> • Scope for greater involvement with key industry sectors affected by green transition. • Smaller firms less well engaged. • Large companies sending employees abroad for training. • Need for greater collaboration with industry on skills needs and delivery plans
Curriculum	<ul style="list-style-type: none"> • Some new green skills curricula in place including a 10-hour TVET module and curricula for specific skills areas. • Collaboration between MITD and Canada on green curricula development 	<ul style="list-style-type: none"> • Challenge of aligning curriculum with rapidly changing skills needs. • Curriculum review cycle time too long and curricula lack flexibility to adapt incrementally. Too many layers of approval.
Learner Engagement and Support	<ul style="list-style-type: none"> • Public awareness and careers fairs take place. • NGOS run sessions in schools on climate change and environmental issues. • Work placements are available 	<ul style="list-style-type: none"> • Public awareness remains low about the benefits of TVET and the importance of green skills. There remains a degree of stigma about TVET compared with university.

		<ul style="list-style-type: none"> • Careers guidance materials and processes are not yet sufficiently engaging green skills. • They may be some resistance by trainers to adopting green skills.
Institutional strengthening/ TVET Workforce Development	<ul style="list-style-type: none"> • International collaboration with the UK on trainer training and TVET institutional development • Some training of in-service workers in green energy skills following trainer training. 	<ul style="list-style-type: none"> • A lack of trained trainers • A need for systematic CPD for trainers to keep them up to date. • A report mechanism to measure the efficiency and effectiveness of TVET. • Systematic capacity building and funds for institutional development • Institutional leadership and autonomy to enable more responsive engagement with employers.
Financing	<ul style="list-style-type: none"> • There are a number of funding sources from government and donor organisations. • Training is free in Mauritius including government funded TVET programmes, the youth employment programme, and traineeships. • MITD and Polytechnics Mauritius are funded by government. • There is a skills development fund funded through a skills levy. • Research and innovation funding is also in place. • Employers make in-kind contributions and in house training. 	<ul style="list-style-type: none"> • Funding should be realigned to build TVET capacity, support organisational change and the growth of green skills. • There needs to be investment in modernising and speeding up curriculum development. • Clarify how different aspects of TVET are financed and how costs are shared with industry. • Actively support small firms and incentivise their investment in skills.

3. Detailed Findings

The following section provides an analysis of the workshop responses to the Greening TVET Self-Assessment Tool and includes details of the main comments and points raised by participants. The workshop was organised in three sessions, progressively working through the seven themes in the tool. The agenda is at annex4. Participants were split into five table groups that stayed together throughout the day. Each group produced a collective response to the questions, adding detailed comments as they worked through each section of the tool. Each group presented a short summary of their findings at the end of each session. Participants were asked to make a response to each question that could be “Yes”, “No” or “*To Some Extent TSE*”. Each table was asked to try and form a consensus on each question and to try to minimise “*To Some Extent*” answers. Their responses were then aggregated for each of the tool’s seven main sections or themes. In addition, participants were asked to complete the tool on a personal basis, again adding comments against each question or section of the tool. Fourteen individual participants were able to complete the tool. This approach was designed to help test the degree of commonality and difference within the room, including the different perspectives of policy makers and those responsible for implementation.

Summary of Collective and Individual Responses

Table 6 provides an overall summary of the responses for each section of the Tool from each of the five groups and from the 14 individual participants who completed the assessment. You will see that not all individuals were able to respond to all questions so an “unclear or no reply” column has been added to the table. The boxes highlighted in green are those with the largest number of responses compared with the total for each section of the tool. The red boxes show where the highest proportion of “No” answers was recorded.

Table 6: Summary of Collective and Individual Responses from Mauritius Green Skills Benchmarking Workshop

The table shows a high level of consistency between collective and individual views, except in the area of learner engagement, where individuals were considerably less positive than the collective view. Policy Coherence, Labour Market Intelligence LMI and Institutional Strengthening show a large number of “to some extent” responses. Employer Engagement and Curriculum have generally very positive responses. Financing has fewer overall responses and more of these are negative than for other sections of the tool.

Q No.	Question Heading	SUMMARY TABLE: MAURITIUS GREEN BENCHMARKING								
	Responses from 5 Tables and 14 Individuals	Tables YES	Tables TSE	Tables NO	TABLES TOTAL	Individuals YES	Individuals TSE	Individuals NO	Individuals Unclear or no reply	INDIVIDUALS TOTAL
04-10	Policy Coherence	8	15	6	29	20	40	24	0	84
11-16	LMI	4	13	0	17	8	37	3	8	56
17-24	Employer Engagement	14	12	9	35	39	18	20	21	98
25-36	Curriculum	22	14	6	42	46	27	25	28	126
37-42	Learner Engagement	6	4	5	15	13	16	21	20	70
43-48	Institutional Strengthening	5	7	3	15	13	17	10	30	70
49-55	Financing	1	3	6	10	0	9	16	31	56
TOTAL		60	68	34	162	139	164	119	138	560
	Most frequent									
	Highest % NOs									

The next section of the report provides a fuller thematic analysis of these responses on a question-by-question basis, including a summary of the main comments included in collective and individual responses and some conclusions and recommendations for further development.

Theme 1: Policy Coherence

This part of the tool explores the extent to which greening the economy is a priority for government in Mauritius, the clarity of strategy for greening the economy and achieving a “just transition”, whether plans are in place for how TVET can support this strategy and the extent to which TVET is linked to environmental and industrial policy and programmes.

Table 7 shows both the collective and individual response to these questions. The clarity of intent by the new government shines through these results with high “Yes” scores for the priority being given to this issue. It is also clear that people recognise the work that has taken place on strategy development but there is considerably more doubt about the effectiveness of implementation. Only 1 of 5 workshop tables and 1 of 14 individual responses was fully positive on implementation effectiveness. The ability to use TVET strategically to help drive greening of the economy is also highlighted as an issue, most clearly through the number of individual “No” responses for Q6-9. These have been marked in yellow. The ? column in this and subsequent tables reflects the number of individuals who did not respond to the question.

Table 7: Summary of Policy Coherence Responses

Q No.	Questions	Collective (5 Tables)				14 Individual Responses				
	Policy Coherence	YES	TSE	No	Total	Yes	TSE	No	?	Total
	Totals	8	15	6	29	20	40	24	0	84
4	Is there strong evidence that greening of the economy is a priority for the government? ¹	5	0	0	5	12	2	0	0	14
5	Does the government have a clear strategy for greening the economy and ensuring a 'just transition'?	2	4	0	6	6	7	1	0	14
6	Is the strategy effectively implemented?	1	2	2	5	1	8	5	0	14
7	Does the government have a good understanding or plan for how TVET can support greening of the economy?	0	4	1	5	0	8	6	0	14
8	Are there clear linkages between the government's TVET policy and environmental policies and programmes?	0	3	1	4	1	7	6	0	14
9	Are there clear linkages between the government's TVET policy and industrial policy?	0	2	2	4	0	8	6	0	14

Participant comments

The comments made collectively and by individuals emphasised the amount of progress on policy development and the commitment of the new government to prioritise greening the economy. The importance of “blue” as well as “green” transition came through clearly, given the importance of sustainable management of the expanse of ocean under the responsibility of the country, and it was clear that fostering sustainability was at the heart of the government’s ambition. Participants quoted a wide range of reports including the Environment Master Plan, the Roadmap and Action Plan for a Circular Economy (2023-33) including cross-cutting measures for Education and Awareness Raising, Greening of the Public Sector and the new 2024 Environment Act. The “Assise de l'environnement” workshop in May 2022 was also widely mentioned as a valuable vehicle for change.

A large number of initiatives were highlighted that are designed to incentivise change and enhance the development of the circular economy. These include the clean-up of waste tips, with EU support, removal of plastic bottles and packaging, recycling, the ecology programme, incentives for solar panel installation, water harvesting and electric vehicles. Particularly notable is the investment in green energy by Omnicane as part of a national strategy to achieve a 60% reduction in carbon by 2030.

More critical voices recognised these developments but argued they were slow to be implemented. It was recognised that internal change in government departments would take some time to settle down post-election, but it was felt there was a need for greater cross-government working to improve coordination and linkages. Stakeholders highlighted the importance of ongoing public sector reform to further enhance governance and accountability.

The climate change committee was welcomed but some voices felt it should move to a more central role under the Ministry of the Environment MoE to facilitate implementation. Some evidence of Ministry join up was cited, including on e-licensing and App development, but it was felt that this needs to go further.

Participants did not see clear linkages between the strategy to green the economy and the development of TVET. It was recognised that MITD had linkages with the MoE and that there were some linkages between TVET and industrial strategies, for example Hydroponics, but that these were generally underdeveloped. Individual providers such as Polytechnics Mauritius, St Gabriel's TVET School and MITD had established some strong industrial linkages and were shaping effective programmes, but there did not seem to be an overall coordinated programme to build the skills base the country needs to effect rapid transition to a circular economy.

There were calls for a whole systems approach led by a new apex body or skills development authority, to bring policy coherence across Government, set a clear vision, coordinate labour market intelligence to be clear about the jobs and skills needs of the future, build system capacity, accelerate curriculum and qualifications reform, and strengthen private sector engagement.

Theme 2: Labour Market Intelligence and Skills Anticipation

Having a strong LMI system is a vital component in shaping a view of job and skills impacts on the economy as a result of technological change, the climate emergency and global economic forces. This section of the tool explores these issues including how well Mauritius is able to assess the jobs that will be created, change or be eliminated due to green transition and the skills gaps that are currently being experienced.

The picture from the data (table 8) shows a degree of uncertainty on these issues with 13 of the 17 collective and 37 of 56 individual responses being "*To some extent*". It is encouraging that no table and only 3 individuals answered "*No*" to any of these questions, but "*Yes*" responses were also quite limited.

Table 8: Summary of LMI Responses

Q No.	Questions	Collective (5 Tables)				14 Individual Responses				
	LMI	YES	TSE	No	Total	Yes	TSE	No	?	Total
	Totals	4	13	0	17	8	37	3	8	56
12	Does your organisation have a good understanding of which new jobs are likely to be created in your country's economy due to the green transition?	2	3	0	5	3	9	0	2	14
13	Does your organisation have a good understanding of which jobs are likely to be eliminated in your country's economy due to the green transition?	1	4	0	5	0	11	1	2	14
14	Does your organisation have a good understanding of which existing jobs will change due to the green transition and how?	1	3	0	4	3	9	0	2	14
15	Does your organisation have a good understanding of the main skill gaps in your country's economy?	0	3	0	3	2	8	2	2	14

Participant Comments

Participants highlighted national reports, including the ILO 2012 report on Skills for Green Jobs in Mauritius¹⁰, and specific organisations at the workshop set out the range of LMI activity they currently undertake. This included:

- MITD draw data from MoE, HRDC, the Economic Development Board and the private sector, to highlight new skills requirements: e.g. in AI /robotics, blockchain, data science, cybersecurity, maintenance, and repair of EVs, EV charging systems. They have identified jobs likely to be eliminated; cashiers, customer /user support, data entry operators, and jobs likely to change; motor vehicle mechanics, electronic technicians.
- In the Fashion sector, a training analysis is conducted in all sectors with questions pertinent to green skills and requirements for transition. An industry advisory committee provides advice on changes taking place.

While a broad understanding of sectors for upskilling/reskilling/new job opportunities was present, there was concern about the lack of national labour market surveys or quantified analysis, with one delegate explaining that procurement of the latest survey was started in 2022 and is not yet completed.

Employer participants felt there was a need for more studies and research, including to learn from best practice abroad. They said they understood the broad direction of job change but that a detailed skills analysis is now needed for each key economic sector, (agriculture, transport, construction, real estate, waste management, energy) to create a platform for effective TVET interventions.

¹⁰ ILO, skills for Green Jobs in Mauritius 2012:

https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_emp/@ifp_skills/documents/publication/wcms_189194.pdf

Theme 3: Employer Engagement

The involvement of employers is an essential component of an effective TVET system. They are best placed to describe the impact on jobs and skills caused by green transition, they need to be helped to support the upskilling and reskilling needed by their workforce and they play an important role in helping training providers shape and deliver appropriate provision including through work-based learning.

Table 9 shows that workshop participants were generally positive about progress in this area. 14 of 35 collective and 39 of 98 individual responses were a “Yes” with particular strengths recorded in relation to employer involvement in the governance of TVET institutions, the development of TVET curricula and contribution to training delivery including through work-based learning.

There were, by contrast, two questions that had a stronger negative response. Of the 5 tables, 3 collective and 7 of 14 individual responses did not see a clear functional mechanism at national level on how green transition would impact on their skills needs. This echoes concerns highlighted on the previous LMI section of the tool. Engagement with the informal sector was also seen as a challenge.

Table 9: Employer Engagement

Q No.	Questions	Collective (5 Tables)				14 Individual Responses				
	Employer Engagement	YES	TSE	No	Total	Yes	TSE	No	?	Total
	Totals	14	12	9	35	39	18	20	21	98
17	Does the TVET system have a clear, functional mechanism for engaging with employers on how transition to a green economy may impact on their skills needs?	1	1	3	5	1	3	7	3	14
18	Does engagement with the green economy include the informal sector?	0	2	3	5	2	1	8	3	14
19	Is there evidence of employers supporting at-risk employees to develop their skills and adaptability?	1	2	2	5	2	6	3	3	14
20	Are employers involved in the governance of TVET institutions?	4	0	1	5	9	0	2	3	14
21	Are employers involved in the development of the TVET curriculum and TVET training programmes?	2	3	0	5	9	2	0	3	14
22	Do employers regularly contribute to the delivery of TVET training programmes?	2	3	0	5	7	4	0	3	14
23	Do employers regularly provide work-based learning or apprenticeship opportunities for TVET learners or graduates?	4	1	0	5	9	2	0	3	14

Participant comments

Participants described how employers are closely involved with MITD. They sit on the Board of Administration, are involved in the DACUM standards setting process and undertake surveys of their employees. They contribute to assessment, the National Apprenticeship Scheme and to part-time training. Links on green skills include, smart agriculture, photovoltaics, solar energy technician, energy audits and the certified energy manager programme.

The Central Electricity Board CEB highlighted work they were doing on the safe installation of solar panels and firms were complimentary about the responsiveness of Polytechnics Mauritius and St Gabriel's TVET school in meeting their needs.

Some questioned the degree of effective national level engagement with key sectors of the economy responsible for transition to a low carbon economy and expressed concern that smaller firms were much less well engaged in TVET and green transition. Employers expressed concern about a lack of qualified trainers to support green transition.

There was a call for a whole system approach, including a road map that could help employers and government work together in building the skills for green transition. There was a suggestion to set up a Green Skills Working Group at MQA to provide a single coherent voice back to government on skills needs in each key sector.

Theme 4: Curriculum and Assessment

This section of the benchmarking tool explores the way in which curricula are developed to meet the needs of green transition, whether curricula have been updated to meet changing needs, the breadth of the curriculum, the importance of foundational and transversal skills as well as environmental awareness. There are also questions on qualification relevance and assessment processes.

Participants were positive about a number of curriculum issues, and this was echoed in individual responses. In total there were 22 “Yes” of 42 collective responses and 46 “Yes” of 126 by Individuals.

Tables were most positive about:

- Q 28. Does the general curriculum for TVET learners include opportunities to continue to develop foundational skills such as literacy and numeracy?
- Q 29. Do the assessment methods used in the TVET sector provide an opportunity to judge learners' foundational skills?
- Q 30. Does the general curriculum for TVET learners include opportunities to continue to develop transversal skills (non- technical, soft skills) such as critical thinking, problem solving, leadership and communication skills?
- Q 34. Have TVET qualifications been updated to reflect changes in the curriculum and skills demand?

Three questions (marked in red) generated the most “No”s from individuals,

- Q 26. Have new TVET curricula been developed for new occupations related to the green economy?
- Q 33. Do the assessment methods used in the TVET sector provide an opportunity to judge learners’ environmental awareness and their understanding of the fundamental elements of the green economy?
- Q 35. Are there mechanisms in place that allow providers to assess and accredit the skills of experienced workers looking to retrain.

Table 10: Curriculum and Assessment

Q No.	Questions	Collective (5 Tables)				14 Individual Responses				
	Curriculum	YES	TSE	No	Total	Yes	TSE	No	?	Total
	Totals	22	14	6	42	46	27	25	28	126
25	Are there processes in place that allow for the curriculum to be reviewed and updated quickly in response to new skills requirements?	2	2	1	5	5	6	0	3	14
26	Have new TVET curricula been developed for new occupations related to the green economy?	2	1	2	5	3	3	5	3	14
27	Has the TVET curriculum related to mid-green occupations been updated to embed new knowledge and skills required to enable the use of new green technologies and approaches?	2	1	2	5	4	6	1	3	14
28	Does the general curriculum for TVET learners include opportunities to continue to develop foundational skills such as literacy and numeracy?	3	2	0	5	10	1	0	3	14
29	Do the assessment methods used in the TVET sector provide an opportunity to judge learners’ foundational skills?	3	0	0	3	7	1	3	3	14
30	Does the general curriculum for TVET learners include opportunities to continue to develop transversal skills (non- technical, soft skills) such as critical thinking, problem solving, leadership and communication skills?	3	0	0	3	7	1	3	3	14
31	Do the assessment methods used in the TVET sector provide an opportunity to judge learners’ transversal skills (non- technical, soft skills)?	1	2	0	3	5	3	3	3	14
32	Does the general curriculum for TVET learners include opportunities to develop environmental awareness and an understanding of the fundamental elements of the green economy?	2	1	0	3	4	3	3	3	14
33	Do the assessment methods used in the TVET sector provide an opportunity to judge learners’ environmental awareness and their understanding of the fundamental elements of the green economy?	0	2	1	3	1	4	6	3	14
34	Have TVET qualifications been updated to reflect changes in the curriculum and skills demand?	3	1	0	4	4	5	1	4	14
35	Are there mechanisms in place that allow providers to assess and accredit the skills of experienced workers looking to retrain?	1	2	0	3	4	2	5	3	14

Participant Comments

Participants highlighted that *“there is a 10-hour module of sustainable development in the general curriculum for TVET learners”* and that *“new curricula (have been) developed for solar, metals workshop, green energy, textiles, advertising etc”*. MITD described how they have collaborated with Canadian and French advisers in shaping new green curricula and that a number of people from MITD and other training institutes have visited Cardiff and Vale College and Scottish Colleges with British Council support to gain insights into green skills curriculum development and delivery. These visits had been highly valued.

The main concern coming through in comments was about the speed at which the curriculum was being updated:

- *“Skills demands change so fast it is like chasing a moving goal post”.*
- *“Align curriculum development with needs of the economy, continuous training and more soft skills”*
- *“Curriculum review processes in place but take time and curricula lack flexibility. All (civil service) courses have a module on environmental awareness. Need regular updating of trainers. The way forward is micro-credentials”.*
- *“Rapid tech change, need to balance traditional knowledge with emerging skills....and a need to change the procedures and processes to make (curriculum) changes. Too many layers of approval”*
- *“In some companies and Gov’t institutions there are Unions/syndicates that employers need to consult with before bring new skills to the company”.*
- *“Challenge of time taken to revise the curriculum, the need for a % of flexibility to tailor the existing curriculum to (quickly) assimilate changes. Need for collaboration with industry. Need for future skills anticipation”.*

It may be helpful to note that the UK is increasingly looking at short-courses and micro-credentialling as a way forward to quickly provide green skills to existing workers while continuing to focus initial training for young people on college-based programmes with a green skills element and apprenticeships. A new apex body, Skills England, has been established to identify skills needs on a sector-by-sector basis, to encourage colleges and training organisations to collaborate and specialise to meet industry needs and to further streamline curriculum development. There is discussion on adding a degree of flexibility to existing curricula to allow rapid adjustment to changing needs and local circumstances. The system in the Netherlands already has a 20% element of flexibility.

Theme 5: Learner Engagement and Support

This section of the benchmarking tool explores the level of public awareness of the opportunities that green skills offer, the quality of careers guidance, the ability to offer flexible provision to meet individuals needs and the extent to which outcomes and learner destinations are tracked.

Ideally, the flow of LMI and the commentary on skills needs from each sector of the economy should feed into a systematic public awareness programme and careers information (online and

face to face) to promote the importance of TVET and show the range of opportunities to help Mauritius become a green/blue economy.

Participants had mixed responses to this set of questions and only 3 of the 5 tables offered views. There were 6 “Yes”, 4 “TSE” and 5 “No” responses. Two questions (marked in red) generated 4 of the 5 “Nos”:

- Q 39. “Are there processes to help those giving career guidance understand the new opportunities and skills needed by the green transition?” and,
- Q 40 “Do career guidance materials include information on these opportunities and required skills?”

Individual responses echoed these concerns. 21 of 70 were “No” responses, 13 “Yes” and 16 “TSE” , with 20 no replies. This is a more specialist area so not all respondents would have knowledge to respond to these questions. It was again careers guidance that was of most concern. 8 of 10 responses were “Nos” to each of Q39 and Q40.

Q37 on public awareness was uncertain with 9 of 10 recording “TSE”.

Q38 and Q41 on modular flexible training and graduate monitoring mechanisms had more positive responses (6 “Yes” of 10 in each case).

Table 11. Learner Engagement and Support

Q No.	Questions	Collective (5 Tables)				14 Individual Responses				
	Learner Engagement and Support	YES	TSE	No	Total	Yes	TSE	No	?	Total
	Totals	6	4	5	15	13	16	21	20	70
37	Are there targeted efforts to increase public awareness of the opportunities that green skills offer?	0	2	1	3	0	9	1	4	14
38	Does the TVET system enable TVET providers to provide modular, flexible, and short-duration training for at-risk workers and others?	2	1	0	3	6	4	0	4	14
39	Are there processes to help those giving career guidance understand the new opportunities and skills needed by the green transition?	0	1	2	3	0	2	8	4	14
40	Do career guidance materials include information on these opportunities and required skills?	1	0	2	3	1	1	8	4	14
41	Is there evidence of effective graduate-monitoring mechanisms being used across TVET institutions to track student employment destinations (e.g. tracer studies)?	3	0	0	3	6	0	4	4	14

Participants Comments

A number of positive initiatives were highlighted in raising public awareness and careers work. These include open days, careers fairs and NGOs running short courses and sessions in schools to initiate children to climate change, renewable energy and biodiversity preservation. Other initiatives include placement work and company/NGO sponsorship.

The problem would seem to be that public awareness is not systematic and participants claim there is no careers guidance from government on new opportunities and skills for green transition. Barriers cited include resistance from trainers to adopt green skills and it was felt that there remains a stigma towards manual/ TVET skills by the public.

The following suggestions were made for improvement:

- An assessment of barriers and enablers and integration with the Youth Employment Programme YEP within Government
- Scholarships and research grants as enablers.
- Involve industry more systematically in schools' career talks.
- Create more on-job training opportunities by adapting YEP and TVET.

Theme 6: Institutional Strengthening

This theme explores the initial training and professional development of TVET staff, the ability of training providers to have the agility needed to quickly respond to changing skills needs, the effectiveness of TVET quality assurance mechanisms and the degree to which the effectiveness of the TVET system is monitored and formally evaluated.

Both the table and individual responses (table 12) tended to be ambivalent on this set of questions. 7 “TSE” of 15 responses from tables and two tables did not answer these questions. From individuals there were 17 “TSE” of 70 individual responses, (13 Yes, 10 No and 30 no reply).

The largest “TSE” response was on Q 45, “Does the TVET system give TVET providers sufficient capacity and flexibility to be able to respond swiftly to changing demands for skills?”, indicating there is more to do in this area.

The highest “No” scores were on Q 47. “Is there a mechanism for monitoring and evaluating the contribution the TVET system is making to supporting greening of the economy?”.

The highest “Yes” score was Q46 (5 Yes of 8 responses) “Is there a quality assurance mechanism that assesses the performance of the TVET system in your country?”

Table 12: Institutional Strengthening

Q No.	Questions	Collective (5 Tables)				14 Individual Responses				
	Institutional Strengthening	YES	TSE	No	Total	Yes	TSE	No	?	Total
	Totals	5	7	3	15	13	17	10	30	70
43	Do the TVET system's initial teacher training and continuing professional development programmes include content on environmental awareness and the green economy?	2	1	0	3	4	4	0	6	14
44	Do TVET staff in relevant disciplines have opportunities to undertake continuous professional development on how greening the economy impacts their discipline?	1	2	0	3	3	5	0	6	14
45	Does the TVET system give TVET providers sufficient capacity and flexibility to be able to respond swiftly to changing demands for skills?	0	3	0	3	1	7	0	6	14
46	Is there a quality assurance mechanism that assesses the performance of the TVET system in your country?	2	0	1	3	5	1	2	6	14
47	Is there a mechanism for monitoring and evaluating the contribution the TVET system is making to supporting greening of the economy?	0	1	2	3	0	0	8	6	14

Participants Comments

Several positive developments were highlighted about effective trainer training, including the training of in-service workers in green skills (certified energy audit, certified energy manager, solar energy technology training). The British Council had sponsored a successful International Skills Partnership through the British Council's Going Global Partnerships programme, involving MITD and St Gabriel's TVET School that had visited Cardiff and Vale College for trainer training on Green TVET. The British Council had also organised a visit for senior officials to Scotland, as part of their annual UK Skills Policy Seminar, to see the UK TVET system in action. These collaborations were praised by all involved, in helping to demonstrate how to create practical training to support green skills development and the tools and processes to assess it effectively.

The Mauritian Design and Innovation Academy highlighted how it trains trainers, certifies them in green transition, and supports awareness campaigns and awards.

On quality assurance, it was explained how MQA provides the QA role in the Mauritian TVET system.

There was a strong view that Mauritius needs more systematic continuous professional development for trainers, so they can keep their skills up to date. There was a need for both technical and soft skills development, including how to help resolve conflicts and promote

collaboration, foster critical thinking, and address complex issues. It was important that green skills training was formally certificated and that collaboration between TVET providers and industry was brought up to the level of the best. Stakeholders suggested that enhancing professional development and recognition could further motivate trainers.

TVET institutions need leaders with the skillset, autonomy, and flexibility to enable more responsive engagement with employers on green skills issues.

It was felt that a report mechanism was required to know if TVET is efficient and that monitoring of quality could be enhanced.

Theme 7: Financing

This theme examines the sufficiency of funding and resourcing of the TVET system to allow it to respond effectively to the need for green skills development. It explores funding for organisational change in the TVET system, funding for retraining workers, costs of training delivery and whether funding allocations take account of the changes in skills and job needs caused by green transition.

Table 13 summarises the data from workshop tables and individual participants.

There were only a limited number of responses to the questions on finance, with only 3 table responses and 7 individuals answering the first three questions and only 1 table and 4 individuals answering the final question on funding and changing skills needs. Responses need to be read with caution in this context, but it is worth noting that only one question (Q54, on training delivery) had any “yes” response and two “TSE” responses from tables, with 5 “TSE” responses from individuals.

There were a high proportion of “No” answers, 6 of 10 from tables, with only 1 Yes and 3 TSE.

16 of 56 individual responses were “Nos” with 0 “Yes” and only 9 “TSEs”. Of the 8 questions with the most “No” responses, 3 were in this section of the tool. All 3 tables that responded to Q52 said “No” to:

- Do you think there is sufficient financing and funding available in your country (from all sources including government, employers, citizens (where appropriate), and international sources) to cover organisational change required in the TVET sector?

2 of 3 tables had a “No” response to Q53:

- Do you think there is sufficient financing and funding available in your country (from all sources including government, employers, citizens (where appropriate), and international sources) to cover retraining at-risk workers for green jobs?

Table 13: Financing

Q No.	Questions	Collective (5 Tables)				14 Individual Responses				
	Financing	YES	TSE	No	Total	Yes	TSE	No	?	Total
	Totals	1	3	6	10	0	9	16	31	56
52	Do you think there is sufficient financing and funding available in your country (from all sources including government, employers, citizens (where appropriate), and international sources) to cover organisational change required in the TVET sector?	0	0	3	3	0	2	5	7	14
53	Do you think there is sufficient financing and funding available in your country (from all sources including government, employers, citizens (where appropriate), and international sources) to cover retraining at-risk workers for green jobs?	0	1	2	3	0	2	5	7	14
54	Do you think there is sufficient financing and funding available in your country (from all sources including government, employers, citizens (where appropriate), and international sources) to cover the costs of delivering training required for new green economy employment?	1	2	0	3	0	5	2	7	14
56	Do TVET funding allocation systems take into account changes in skills and occupations needed due to the green transition?	0	0	1	1	0	0	4	10	14

Participant Comments

A number of positives were highlighted by participants, including a wide range of existing funding sources from the government and donor organisations, including: AFS, UNDP, B Council, JICA, the Australian High Commission, the Indian High Commission and the EU.

It was seen as a real strength that there is a free education and training system with targeted training schemes run by the HRDC/Min of Labour. Examples highlighted were HRDC funding for upskilling at risk workers including a skills development fund, a training levy of 1.5%, MITD and Polytechnic funding, Erasmus, CSR, and student incentives in terms of materials available for young people. Also highlighted were traineeships, the youth employment programme and government funded TVET programmes. Research and innovation funding schemes were also mentioned, including the national small firm incubation scheme, proof of concept scheme, innovation boost grant and national innovation challenge.

The role of employers was also emphasised, including employer in-kind contributions through traineeships, internships, time off for employees and HRDC refunds, HSBC funding for electric vehicles and private sector funding to support green skills transition in TVET.

Employers send employees to be trained, including internationally, provide in house training, upskilling initiatives, scholarships and support for worker transitioning.

Despite this extensive support, there was a sense that funding now needs to be realigned to build TVET capacity, support organisational change in the TVET sector and the growth of green skills in TVET. It was suggested existing programmes may need to be updated, new programmes created where needed and that government should clarify how different aspects of TVET are

financed, e.g. reskilling/upskilling, training in new areas through collaborative partnerships and programmes to help retrain redundant workers.

It was argued that corporates could support training costs through their own budgets if they were allowed tax rebates, but that small businesses need government incentives and support for retraining at-risk workers.

4. Summary of Strengths, Gaps and Opportunities

The final questions (Q58-60) in the self-assessment tool, seek comments on the perceived strengths, gaps and opportunities for further development of the TVET system in support of transition to a green economy. Also, what support is needed by the system to accelerate change. Finally, participants were asked to set out their “biggest ask” for change going forward. All workshop tables contributed to this final session, although not all tables replied to each question. A total of 7 individuals offered comments.

Strengths

The main perceived strengths of the current system are the commitment of government to green transition, that a strong institutional TVET structure is in place, has stood the test of time and adapted to change over a 30-year period and that some good practice is already in place on green skills, including on curriculum, industry links and delivery. Specific comments were:

- *“Commitment of Government”*.
- *“Structure in place”*
- *“Institutions that have stood the test of time”*.
- *“Several good practices already in place that can be aligned with the green agenda”*.
- *“More than 30 years of TVET experience”*
- *“Island wide distribution of training institutions in place- MITD, Polytechnics Mauritius etc. Pool of students”*
- *“Institutional set up, infrastructure and human resources. Institutions e.g. MITD, Polytechnics M and Universities”*
- *“Practical, TVET industry links”*
- *“We have well established institutions that have adapted over time”*.

Gaps and Challenges

The main gaps and challenges were seen to be a need for greater clarity on how to translate policy into action, with a strong call from some participants for a clear “roadmap” supported by a long-term vision of how TVET will be developed to meet the skills needs of green transition and

a clear regulatory and governance framework. Policy coherence was the first priority. It was argued that there are currently lots of initiatives, but they are not joined up.

Private sector participants were concerned about the high cost of sending employees abroad for training where local training was not available and called for closer collaboration with the government on policy and implementation planning and with training institutions and emerging green industries to improve responsiveness and training relevance. A lack of qualified trainers and equipment and technology gaps were also mentioned. One participant suggested that the current approach was rather fragmented and that a whole system approach was now needed to make a step change in progress.

Specific comments were:

- *“Policy direction- need a clear roadmap”.*
- *“Scenario planning, (resource needs might vary, but skills gaps unlikely to change much)”*
- *“Align stakeholders”*
- *“High cost of overseas expertise in green elements /contents when not available locally /in house”*
- *“Insufficient collaboration with industry”*
- *“Lack of qualified trainers”*
- *“A lack of basic information to start green skills TVET”.*
- *“Equipment and technology gaps”*
- *“Lack of funding”*
- *“Lack of expertise in emerging green technologies”*
- *“Reduced intake of students”*
- *“Insufficient collaboration with industry and a lack of qualified trainers”*
- *“Insufficient alignment with emerging green industries and shortage of qualified trainers”*
- *“(Need) a clear roadmap and policy direction, scenario planning and alignment of stakeholders”*
- *“No long-term vision”*
- *“No clear road-map available supported by a clear long-term vision”*
- *“The need for a whole system approach”*

Support Needed

Participants felt the main support needed by the TVET system in Mauritius was to further strengthen policy implementation at the national level and to provide practical technical support at the institutional level in the following areas:

- Clarify the vision and strategy for TVET green skills development and possibly assist with the development of an Apex body,
- Strengthen public-private partnerships, policy dialogue and consultation, to help align government and industry so they are moving together in the same direction,
- Improve the process to identify skills needs and gaps, with improved alignment with emerging green sectors on skills needs and effective delivery.
- Technical support to strengthen and align TVET institutions so they learn from best practice and consistently have the capacity and capability to deliver high quality, relevant training,
- Identifying sources of funding for capacity building, equipment, and infrastructure,
- Enhancing teacher training and professional development,
- Costing programmes and identifying sources of funding for delivery.

Specific comments were:

- *“Policy coherence”*
- *“Identifying skills needs and gaps”.*
- *“Prioritising training programmes and stakeholders’ roles”*
- *“Costing programmes and identifying financing”.*
- *“Strengthening public/private sector dialogue”.*
- *“Adequate funding and resources for capacity building, equipment and development of appropriate infrastructure”*
- *“Vision and strategy”*
“Creation of an Apex body”
- *“Improved career guidance to see the green economy opportunities”.*
- *“Public private partnership, policy dialogue and consultation”*
- *“Expert guidance, funding, technical support, and synergy between existing TVET institutions*
- *Stronger alignment with green technologies, enhanced teacher training and access to green entrepreneurship training”*
- *“Policy coherence”*
- *“Identifying skills needs/gaps”.*
“Prioritising training programmes and stakeholders’ role”
“Costing programmes and identifying financing”.
- *“Better public private dialogue”*
- *“Alignment of institutions and break silo mentality. Encourage public private collaboration”.*
- *“Government and private support, clear vision for all stakeholders to move in the same direction in a harmonised approach”.*
- *“Funding”*
- *“Financing ,expertise and R&D”*

Biggest “Asks”

This final question was designed to pick up the most important steps that now need to be taken to further strengthen the TVET system on green skills. The comments were very wide ranging, from specific actions to much broader comments about sustainability, agriculture, and eco-tourism. Many comments echoed those in the previous sections on gaps, challenges, and support needs, but there were some new and additional proposals including:

- To set up a Green Skills Sector Working Group at the MQA to work out the Unit Standards at national level for (green) qualifications at different levels on the NQF. Use this to develop the Green Skills Competency framework for Mauritius.
- Fund actions under the existing Climate Emergency Roadmap and generate a climate emergency skills action plan for Mauritius.
- Constant capacity building of all stakeholders including government and TVET institutes.

The specific comments were:

- *“Set up a Green Skills Sector Working Group at the MQA to work out the Unit Standards at national level for qualifications at different levels on the NQF*
- *Develop the Green Skills Competency framework for Mauritius.*

- *Generate a climate emergency skills action plan for Mauritius.*
- *Funding for Trainer training, resources, and equipment*
- *Review Government policies to encourage private sector to invest.*
- *Apex body missing*
- *Research and LMI data.*
- *Right values*
- *Agriculture: reduce pesticide use*
- *Blue economy: sustainability*
- *International organisation commitments in silos*
- *Responsible / eco-tourism*
- *Adequate funding for Green TVET*
- *Awareness of Green Skills TVET*
- *Review the education system and include Green Skills from Primary*
- *Capacity building of educators/trainers*
- *Include stakeholders in planning of Green Skills, (more collaboration between industries and institutions)*
- *Needs driven training.*
- *Foster collaboration with international institutions*
- *Encourage research and innovation in the green economy.*
- *Support the Gov't of Mauritius on transition to a green economy*
- *Clearer definition of green skills*
- *Funding for implementation of strategies on greening/ circular economy"*
- *Constant capacity building of all target groups (Gov't, TVET institutes etc.)*
- *Fund actions under the Strategies e.g. CE Roadmap.*
- *Support to the Government of Mauritius to transition to a green economy."*

5. Conclusions and Recommendations

The following recommendations are drawn from the data and comments made by participants at the Greening TVET Systems workshop in Mauritius. They also draw on ideas and suggestions made during discussions with key stakeholders at interviews ahead of the workshop. The recommendations are organised using the same structure as the self-assessment tool; (i.e. policy, LMI, employer engagement, curriculum and assessment, learner engagement and support, institutional strengthening, and financing).

Policy

The new Government has shown strong commitment to addressing climate change and developing the circular economy, with a clear focus on blue and green transition. The Government Programme 2025-2029 has "fostering sustainability" at the heart of its ambition.

While the policy position is strong, implementation remains a significant challenge with participants calling for a whole systems approach to TVET development including greater coherence across government, closer collaboration and partnership with industry and a single

clear vision all stakeholders can get behind. Concerns include the need for a more joined up strategy including incentives for small firms to invest and removal of hurdles inside government that may be slowing down change.

Policy Recommendations

1. **Establish a Permanent Green Economy Advisory Council** to support a whole system approach to development¹¹ This body to be tasked with advising on policy, investment and innovation, building system capacity, accelerating curriculum and qualifications reform and strengthening private sector engagement. It should include representatives from government, business, academia, and civil society.
2. **Focus on Implementation and delivery.** Stakeholders are seeking more support in turning policy intent into effective action on the ground in terms of effective TVET delivery of relevant skills to support economic growth and green transition.
3. **Leverage Existing Structures.** Align with the National Steering Committee under PAGE¹² and build on PAGE outputs such as the skills roadmap.
4. **Strengthen training for civil servants** and professionals to support government to have the digital tools and systems to modernise their practice, speed decision making and create the conditions for TVET system success.
5. **Focus on Skills Implementation for Strategic Sectors.** Strengthen the link between TVET institutions and employers in strategic industrial sectors to ensure the supply of future focussed skills to support green transition.

Labour Market Intelligence LMI

While participants felt there was a broad understanding of the skills and jobs impacted by green transition, there was concern about the lack of labour market surveys or analysis to fully understand the opportunities that may emerge on a sector-by-sector basis and to provide a stronger basis for skills planning and delivery to match the demand and supply of skills.

LMI Recommendations

6. **A Skills Roadmap should be developed for key economic sectors**, (blue economy, renewable energy, sustainable tourism and green finance), led by employers and brought together through a Green Skills Working Group, to provide a single coherent voice back to government on skills needs.
7. **Accelerate the national skills survey** procurement process to ensure high quality intelligence on jobs and skills is available to all stakeholders in Mauritius.

¹¹ To note that the UK government has a Green Economy Council and has also launched a new Apex skills body called Skills England in 2025 tasked with similar responsibilities to those recommended here, although with a wider remit to meet the 5 missions of the new government, including economic growth as well as addressing green energy issues.

¹² The UN Partnership for Action on the Green Economy. Mauritius joined in 2014 and is now a graduate member. Included a Green Economy assessment of 6 economic sectors in 2015, supported the government's 2017-20 strategic plan, a 2018 learning needs assessment, a 2019 sustainability strategy and the 2020-24 National Programme "Towards an Inclusive, High Income and Greener Mauritius. In 2020 capacity building workshops and trainer training and in 2021 the National Steering Committee was launched. In 2023 a Skills Roadmap for a Green Economy workshop took place to validate a number of key reports on skills for greening the economy.

Employer Engagement

While employer engagement was described in positive terms by those participants in government and public sector institutions, the private sector were seeking more active collaboration. Firms were complimentary about the responsiveness of Polytechnics Mauritius and St Gabriel's TVET School but questioned the degree of effective engagement by government with key sectors of the economy responsible for transition to a low carbon economy. The need to more actively engage and incentivise smaller firms was also raised by a number of participants and the need to create more on-the-job placements for trainees.

Employer Engagement Recommendation

8. **Encourage public-private partnerships in strategic sectors**, including a high-level consultation group with leading industry figures and training institute leaders to plan the implementation of green skills development in strategic sectors and sustain policy dialogue and consultation on TVET.

Enhance Public Engagement and Education

Curriculum and Assessment

Progress has been made in developing green skills curricula, including a 10-hour module of sustainable development in the TVET curriculum, collaboration between MITD and Canadian and French advisers on green skills modules and collaboration with Cardiff and Vale College supported by the British Council. Participants at the workshop recognised this but were concerned about the speed at which curricula were being updated.

Curriculum Recommendations

9. **Integrate green economy issues and skills more effectively into the curriculum.** Create green skills centres of excellence for priority sectors of the economy, (e.g. renewable energy, EV maintenance, marine and construction), building on the best of existing TVET provision, with the employer engagement, autonomy, and financial stability to drive scale and impact.
10. **Accelerate approval processes for qualifications** and curriculum so that they can more quickly reflect rapidly changing skills needs,
11. **Build a degree of flexibility into future curricula design** to allow training institutions to rapidly adapt provision to meet changing needs without having to seek national approval. Short courses and micro-credentials may also provide a useful way forward for updating the existing workforce.

Learner Engagement and Support

While it was recognised that careers fairs and open days take place, participants felt that a more systematic approach was needed to improve public awareness of the value of TVET, together with improved careers advice on the new opportunities and jobs arising from green transition. This should be supported by the improved flow of LMI as discussed above.

Learner Engagement Recommendation

12. **Launch a public awareness and careers campaign.** Provide support to update careers staff on green skills opportunities.

Institutional strengthening and TVET Workforce Development.

Participants highlighted the need for continuous professional development and exposure to best practice on an international basis. The International Skills Partnership with Cardiff and Vale College was seen as very valuable in helping to demonstrate how to create practical training to support green skills development and the tools and processes to assess it effectively.

While government and stakeholders such as the Catholic Church and the private sector are already investing significantly in TVET infrastructure, a more systematic programme of capital investment will be needed to allow institutions to fully meet industry skills needs.

Institutional Strengthening Recommendations

13. **Extend and enhance international collaboration** using the British Council or similar model, to develop trainer trainers in each key economic sector that can then build a substantial pool of teachers and trainers with expertise in green skills and improve collaboration between TVET institutions in Mauritius.
14. **A planned programme of capital investment** to enhance TVET institutional capacity and provide infrastructure and facilities to deliver green skills.

Financing

While a wide range of sources of funding are available from the government and donor agencies, a degree of realignment of existing programmes and funding was proposed as an important way forward, including the use of the existing employer levy and the incentives for co-financing with the private sector.

Financing Recommendation

15. **Promote Green Financing and Innovation.** Expanding access to green finance, including a planned programme of capital investment to enhance TVET institutional capacity and provide infrastructure and facilities to deliver green skills and support circular economy models.
16. **A detailed review of sources and application of funds** to TVET and how more substantial resources could be provided for green skills development, including through improved coordination of donor agency support.

Simon Perryman

For the British Council

April 2025

Feedback from Key National Partners

Following the preparation of this draft report, the British Council invited feedback from key national stakeholders to ensure alignment with national policy priorities and sectoral strategies. The Ministry of Environment, Solid Waste Management and Climate Change; the Ministry of Tertiary Education, Science and Research; and the Higher Education Commission provided written comments.

This section summarises **new elements and additional considerations** proposed by these partners, as well as areas that were **partially addressed in the report but merit further emphasis or detail**. These contributions are intended to complement the existing analysis and recommendations, reinforcing the shared commitment to advancing green skills development in Mauritius.

Ministry of Environment, Solid Waste Management and Climate Change

The Ministry welcomed the report's alignment with the national Circular Economy Roadmap and offered the following **enhancements**:

- **Explicit linkage to Key Project 65** of the Circular Economy Roadmap, which calls for mandatory integration of circular economy principles into TVET programmes.
- **Inclusion of Business Mauritius** as a strategic partner, recognising its role as co-chair of the Circular Economy Steering Committee and its leadership in two of the five Circular Economy Platforms.
- **Institutional mapping**: A comprehensive list of TVET institutions delivering relevant programmes to define the scope of implementation and ensure sectoral coverage.
- **Training Needs Analysis (TNA)**: Incorporation of a TNA as a formal deliverable to inform programme design and ensure alignment with industry requirements.
- **Verification of institutional capacity**, particularly the Mauritius Institute of Training and Development (MITD), to lead trainer training activities effectively.

These considerations strengthen the operational clarity of the roadmap and reinforce the importance of structured collaboration between government, industry, and training institutions.

Ministry of Tertiary Education, Science and Research

The Ministry commended the report's evidence-based approach and international collaboration focus, while recommending **additional measures** to integrate research and innovation into the green skills agenda:

- **Research and innovation integration:** Establishment of research consortia linking universities, TVET institutions, and industry partners to drive green technology development and knowledge transfer.
- **Articulation pathways:** Development of structured progression routes from TVET to higher education, supported by the National Credit Value and Transfer System, to promote lifelong learning.
- **Advanced skills development:** Introduction of postgraduate programmes in green technology leadership, research chairs in sustainable technology, and innovation incubators to build high-level expertise.
- **Governance enhancement:** Consideration of a Green Skills Innovation Authority to coordinate research priorities, technology transfer, and quality assurance across the tertiary education system.
- **Expanded monitoring metrics:** Inclusion of research outputs—such as patents, publications, and technology transfer agreements—alongside employment outcomes in the evaluation framework.

These proposals aim to position Mauritius as a regional leader in green technology research and innovation, ensuring that skills development is underpinned by robust research and aligned with future economic opportunities.

Higher Education Commission

The Higher Education Commission (HEC) emphasised the strategic role of **micro-credentials** in creating a more agile and responsive education system. While the report references micro-credentials in the context of curriculum flexibility, the HEC recommended a more structured approach:

- **Regulatory framework:** Alignment with the HEC's statutory mandate under the Higher Education Act and its Blueprint for Micro-Credentials in Higher Education, which defines quality assurance mechanisms and approval processes.
- **National framework development:** Establishment of a comprehensive framework for the design, delivery, and recognition of industry-led micro-credentials, ensuring consistency and international comparability.
- **Industry collaboration:** Promotion of co-designed micro-credentials with employers to ensure relevance and strengthen workforce alignment.

-
- **Stackable pathways:** Use of micro-credentials as building blocks for formal qualifications, enabling flexible progression from TVET to higher education and supporting recognition of prior learning.

These enhancements underscore the importance of embedding micro-credentials within the green skills strategy as a mechanism for rapid skills acquisition and improved employability.

Closing Note

The perspectives summarised above represent **additional considerations and refinements** that complement the findings of this report. They will inform the prioritisation of actions and the design of subsequent implementation steps, reinforcing a shared commitment to advancing Mauritius's transition to a green economy through coordinated policy action, institutional strengthening, and innovative approaches to skills development.

Annexes

Annex 1. Glossary

Green transformation (green transition)

Green transformation is sustainable and inclusive socio-economic structural change that allows the economy and society to move from the current environmentally unsustainable situation towards a new sustainable environment. The plan of action for achieving this transformation is Agenda 2030. The terms "green transformation" and "green transition" are often used interchangeably. The term "green transformation" is increasingly linked to the concept of "just transition" which reflects the comprehensive approach and paradigm shift. ¹⁻³

Agenda 2030

On 25 September 2015, the 193 member states of the UN approved the 2030 Agenda for Sustainable Development, an ambitious plan to achieve prosperity that is respectful of the planet and its inhabitants. This endorsement of Agenda 2030 and its 17 Sustainable Development Goals (SDGs) reaffirms the world community's commitment to all three dimensions of sustainable development, namely, economic, social, and environmental. The overarching goal is to leave no one behind. Education is perceived a public good and is an essential step in the process of achieving a green transformation. ⁴

Education for Sustainable Development (ESD)

ESD empowers learners with knowledge, skills, values, and attitudes to take informed decisions and make responsible actions for environmental integrity, economic viability, and a just society. ESD is recognised as a key enabler of all SDGs and achieves its purpose by transforming society. ⁶

Green economy

Several definitions of green economy have been defined by different organisations, but the central idea of improved human well-being and social equity while significantly reducing environmental risks and ecological scarcity appears to be common. One of the most cited and generally agreed definitions derives from the UN Environment Programme (UNEP), which defines the green economy as low carbon, resource efficient, and socially inclusive. According to UNEP, in a green economy, growth in employment and income is driven by public and private investment into economic activities, infrastructure, and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services. These green investments need to be enabled and supported through targeted public expenditure, policy reforms, and changes in taxation and regulation. ⁷⁻⁸

Green growth

Green growth is a paradigm in which green policies, innovation, and investments drive sustainable economic development. More broadly, green growth is an approach for achieving a

number of simultaneous objectives of sustainable development: (1) avoiding and curbing greenhouse gas emissions, (2) building resilience to climate extremes and longer-term change, (3) using resources more efficiently, (4) providing sustainable and equitably distributed increases in GDP and standards of living, and (5) valuing the often economically invisible natural assets that have underpinned economic success over the centuries. The concept of green growth has been informed by leading international organisations (e.g. UN, EU, OECD) involved in green growth planning and development. The concepts of green growth, green economy, and low carbon development are often used interchangeably.

Green jobs

ILO defines green jobs as decent jobs that contribute to preserving or restoring the environment. These jobs can be in traditional sectors such as manufacturing and construction or emerging green sectors such as renewable energy and energy efficiency. Green jobs thus help to (1) improve energy and raw materials efficiency, (2) limit greenhouse gas emissions, (3) minimise waste and pollution, (4) protect and restore ecosystems, and (5) support adaptation to the effects of climate change. At the enterprise level, green jobs can produce goods or provide services that benefit the environment, for example, green buildings or clean transportation. However, these green outputs (products and services) are not always based on green production processes and technologies. Therefore, green jobs can also be distinguished by their contribution to more environmentally friendly processes. For example, green jobs can reduce water consumption or improve recycling systems. Yet, green jobs defined through production processes do not necessarily produce environmental goods or services.⁹

Green knowledge

Green knowledge is a person's capacity to understand and evaluate practices and strategies of sustainability for the development of greener performance trajectories in society and the environment.

Green recovery

Green recovery is the expression used for public and private economic recovery measures aligned with long-term climate change and sustainability objectives. These measures target structural reforms and transformative change necessary to move towards sustainability, resilience, and climate neutrality (e.g. as economic and social life gets back on track postCovid-19). Green recovery leads to long-term green growth while ensuring that natural livelihoods are preserved for future generations.¹⁰⁻¹¹

Green technology

The term green technology (also green tech) can be broadly defined as technology that has the potential to significantly improve environmental performance relative to other technology.

Just transition.

ILO defines "just transition" as the need for nations and businesses to transition towards greener, more resilient and climate-neutral economies and societies in order to tackle pressing environmental challenges like climate change, pollution, and plummeting biodiversity. The term "just transformation" is used interchangeably. It means greening the economy in a way that is as

fair and inclusive as possible to everyone concerned, creating decent work opportunities, and leaving no one behind. a just transition involves maximising the social and economic opportunities of climate action while minimising and carefully managing any challenges – including through effective social dialogue among all groups impacted and respect for fundamental labour principles and rights.¹²

Skills anticipation in TVET

Skills anticipation is a process of identifying the skills that will be needed in the future, to prepare individuals and organisations to meet those needs. In the context of TVET, skills anticipation is crucial in ensuring that programmes are relevant and up-to-date, and that they equip learners with the skills needed for current and future labour market demands. Steps could include:

- **Analyse labour market trends:** TVET providers should closely monitor the labour market and identify emerging trends in the types of jobs and skills that are in demand. This can be done through analysing job vacancy data, conducting surveys of employers, and monitoring industry news.
- **Conduct skills assessments:** TVET providers should assess the skills of their current students and graduates to determine if they are meeting the needs of the labour market. This can be done through surveys, interviews, and focus groups with employers.
- **Engage with employers:** TVET providers should engage with employers to understand their specific skill needs, including both current and future needs. This can be done through industry partnerships, advisory boards, and apprenticeship programmes.
- **Monitor technological advancements:** TVET providers should stay up to date on technological advancements and their impact on the labour market. This can be done through attending industry conferences, monitoring news and industry reports, and engaging with technology providers.
- **Develop flexible curricula:** TVET providers should develop flexible curricula that can be easily updated to meet changing labour market needs. This can be done through incorporating modular and stackable credentials, using competency-based education, and providing opportunities for lifelong learning.

Skills for the green economy or skills for green jobs (green skills)

Internationally, the terms "green skills" or "skills for green jobs" are widely used. However, as these are not actually green skills, but the environment and framework in which they are used, it is preferable to use the phrase "skills for the green economy" rather than "green skills". ILO defines "skills for green jobs" as an overarching term for the knowledge, competence, and experience needed to successfully perform tasks for green jobs and to make any job greener. The term includes both core and technical skills and covers all types of occupations that contribute to the process of greening products, services, and processes, not only in environmental activities but also in other sectors. The UNIDO definition of green skills is also widely accepted: "Green skills are the knowledge, abilities, values and attitudes needed to live in, develop, and support a sustainable and resource-efficient society."¹⁴

References from glossary

1. Cheba K, Bąk I, Szopik-Decpczyńska K, Ioppolo G. Directions of green transformation of the European Union countries. Ecological Indicators. 2022;136:108601. doi:10.1016/j.ecolind.2022.108601
2. Green transition. Accessed November 2, 2022. https://reformsupport.ec.europa.eu/what-we-do/green-transition_en
3. The Macroeconomics of a Green Transformation: The Role of Green Investment | Heinrich Böll Stiftung | Brussels office - European Union. Heinrich-Böll-Stiftung. Accessed November 2, 2022. <https://eu.boell.org/en/macroeconomics-greentransformation>
4. Transforming our world: the 2030 Agenda for Sustainable Development | Department of Economic and Social Affairs. Accessed November 2, 2022. <https://sdgs.un.org/2030agenda>
5. "Building forward better: Reaffirming the Sustainable Recovery Pledge and taking stock of commitments." OHCHR. Accessed November 2, 2022. <https://www.ohchr.org/en/2022/01/building-forward-better-reaffirming-sustainable-recovery-pledge-and-taking-stock>
6. Education for sustainable development: a roadmap - UNESCO Digital Library. Accessed November 2, 2022. <https://unesdoc.unesco.org/ark:/48223/pf0000374802.locale=en> www.britishcouncil.org 59
7. Environment UN. Green Economy. UNEP - UN Environment Programme. Published January 23, 2018. Accessed November 2, 2022. <http://www.unep.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/green-economy>
8. UNEP. Green economy. UNEP - UN Environment Programme. Accessed November 3, 2022. <http://www.unep.org/explore-topics/green-economy>
9. What is a green job ? Published online April 13, 2016. Accessed November 2, 2022. http://www.ilo.org/global/topics/green-jobs/news/WCMS_220248/lang--en/index.htm
10. giz. Green Recovery. Accessed November 2, 2022. <https://www.giz.de/en/ourservices/99580.html>
11. | Green recovery. Accessed November 2, 2022. <https://www.imf.org/en/Topics/climatechange/green-recovery>
12. Frequently Asked Questions on just transition. Published October 22, 2021. Accessed November 2, 2022. http://www.ilo.org/global/topics/green-jobs/WCMS_824102/lang--en/index.htm
13. What is ENoLL? European Network of Living Labs. Published July 13, 2017. Accessed November 28, 2022. <https://enoll.org/about-us/>
14. Jeon OSI• CH• MDH• S. Skills for Green Jobs: A Global View.; 2011. Accessed November 2, 2022. http://www.ilo.org/global/publications/ilo-bookstore/orderonline/books/WCMS_159585/lang--en/index.htm

15. Etzkowitz H. The Triple Helix of University - Industry - Government. Proceedings of 51- st EOQ Congress). Published online 2007:18.
16. Carayannis EG, Barth TD, Campbell DF. The Quintuple Helix innovation model: global warming as a challenge and driver for innovation. Journal of Innovation and Entrepreneurship. 2012;1(1):2. doi:10.1186/2192-5372-1-2
17. Hahn, K., Halle, R., Lazor, A., Assaf, L., Hayek, N., Kagiri-Kalanzi, E., Switzer, C., & Volles, N. (2023). Skills for the Green Transformation Toolkit. GIZ, VET Toolbox. Retrievable from <https://vettoolbox.eu/publications/skills-for-green-transformation/>

Annex 2. Agenda for the Workshop on Green Skills Benchmarking in Mauritius: 20 February 2025. The Ravenala Attitude Hotel, Balaclava, Mauritius.

Timing	Activity
08:30 – 09:00	Arrival
09:00 – 09:15	Introduction and Purpose of the Workshop
09:15 – 10:00	Presentation on the Benchmarking Tool and Workshop Structure, followed by Questions. Background on Progress in the UK and a Case Study on Sustainability at Barnsley College
10:00 – 10:45	Utilising the Benchmarking Tool: Session 1: - Policy Coherence and Labour Market Information
10:45 – 11:00	Coffee Break
11:00 – 11:15	Feedback from Tables
11:15 – 12:15	Session 2: Employer Engagement and Curriculum
12:15 – 12:30	Feedback on Employer Engagement
12:30 – 12:45	Feedback on Curriculum
12:45 – 13:15	Address by the UK High Commissioner
13:15 – 14:00	Buffet Lunch
14:00 – 14:45	Session 3: Learner Engagement and Support, Institutional Strengthening, and Funding
14:45 – 15:15	Feedback
15:15 – 15:45	Discussion on Ten Key Priorities for Action
15:45 – 16:30	Coffee Break and Networking
17:00	Conclusion of the Day

Annex 3: Workshop Participants: 20 February 2025

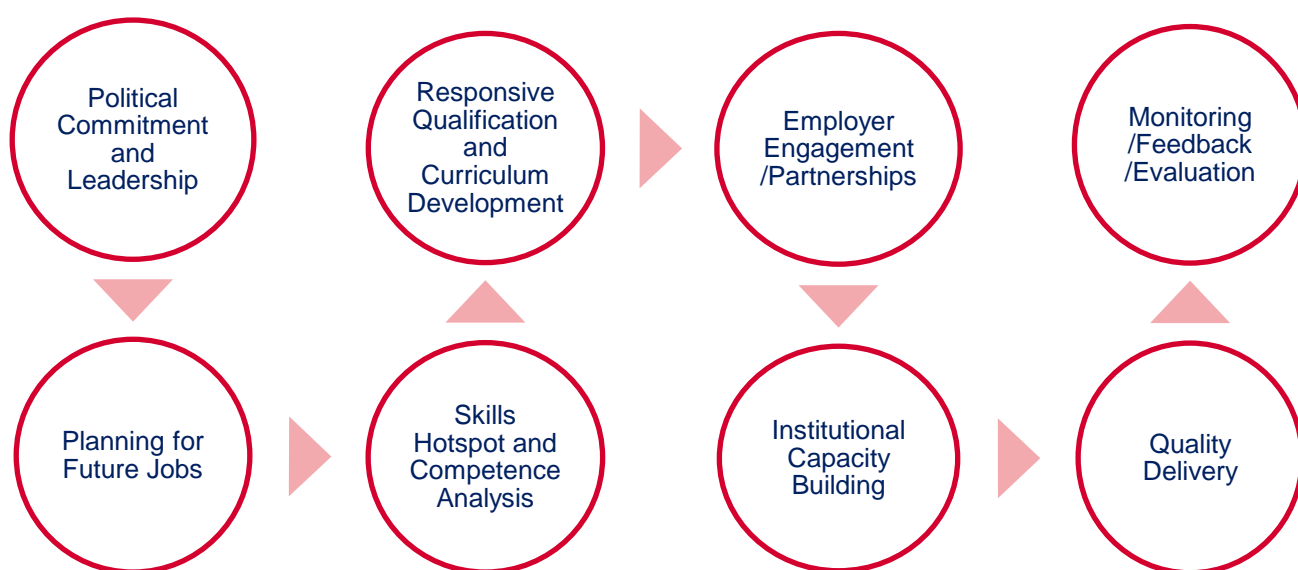
Title	Name	Organisation	Role
Mr.	Goran Mandic	British High Commission, Port Louis	Deputy High Commissioner
Mr	Antoine Paté	New Maurifoods- Eclasia Group	Operations and Development Manager
Mr.	B. Beerachee	Ministry of Environment, Climate Change and Solid Waste Management	Director at the Solid Waste Management Division
Mrs	Deeptee K Bungaree-Gooheeram	Department for Business and Trade	Country Director
Mrs.	Ellie Utterson	The British Council	Consultant - TVET Global Programme
Mrs	Hafiza Jepaul	The British Council	Country Director
Miss	Justine Melot	Agence Française de Développement	Chargée de mission
Mr.	Kreshnaduth Googoolye	Human Resources Development Council	Senior Research & Development Officer
Dr.	Mahen Conhaye	Gamma Materials Ltd	Head Technical, Product & Business Development
Madam	Maneshah NEPAUL	European Union	Project Manager
Mr	Maudarbocus Sayadaly	Mauritius Institute of Training and Development (MITD)	Director
Mr	Mohammad Nizaam Abdool	Mauritius Institute of Training and Development (MITD)	Training Centre Manager
Mr.	Naweid Fakeermahamood	The British Council	Programme Manager Education
Dr	Olivier Pasnin	United Nations Development Programme	Programme Technical Specialist
Mr	Pierre Alain Etienne Bêche	College Technique Saint Gabriel	Proviseur
Dr	Pierre Edgard Daniel Marie	Mauritius Oceanography Institute	Director

Dr	Poonam Veer Ramjeawon	Mauritius Research and Innovation Council	Research Coordinator
Mr	Praveen Makool	Mauritius Maritime Training Academy	Head
Mr	Rajcoomar Ramchurun	Mauritius Qualifications Authority	Manager
Mr.	Rajivsingh Ramlugon	Omnicanne Limited	Group Chief Sustainability Officer
Professor (Dr)	Ramesh Durbarry, G.O.S.K.	Civil Service College	Director General
Mr.	Rooben Maran	CEB (Green Energy) Co. Ltd	Acting Head of Renewable Energy Department
Mr.	Roshan Teeluck	The British Council	Consultant – TVET Coordinator
Mr.	S. Buskalawa	Ministry of Environment, Climate Change and Solid Waste Management	Acting Divisional Environment Officer at Environment and Climate Change Division
Dr.	Sabrina Ramsamy Iranah	Academy of Design and Innovation	Director
Mr.	Simon Perryman	The British Council	UK Consultant
Mrs	Soodevi Soobron	Ministry of Environment, Solid Waste Management and Climate Change	Divisional Environment Officer
Mr.	Sunil Mohun	College Technique Saint Gabriel	Adoint Proviseur
Mr	Vashil Jasgray	Kolektif Rivier Nwar	Project Manager
Mr	Vedanand Bhurosah	Ministry of Tertiary Education, Science and Research	Assistant Director
Mr	Vimal Thakoor	IMF	Resident Advisor
Mr	Vishen Narain	Mauritius Broadcasting Corporation	Marketing Manager
Mr	Yamal Matabudul	Polytechnics Mauritius	Chief Executive Officer
Mr.	Yan Hookoomsing	HSBC	Head of Sustainability

Annex 4 : A Roadmap for Greening TVET in Mauritius.

The diagram below sets out a possible Roadmap to support Mauritius in building a TVET system that can properly support the country by providing the green skills needed to underpin the transition to a low carbon economy. The Roadmap reflects current experience in supporting skills development in the UK and is built on three main principles:

- Business Relevance – the ability of the TVET system to keep pace with the speed of industrial change, and deliver up-to-date training,
- Agility and Responsiveness – the ability of TVET institutions to quickly flex their offer to meet the specific needs of each industry and business,
- Credibility, in terms of the structure, capacity and capability of each TVET institution to deliver industry standard training of high quality.



Each step in the Roadmap is described in more detail below.

Policy, Commitment and National Leadership

While Mauritius has clear environmental laws and regulations, coherent implementation across Government remains a challenge. Three actions are recommended:

- **Build Alliances and Partnerships:** The Government should work together with international organizations, NGOs civil society and other countries to share knowledge, resources, and best practice. Collaboration is essential to face complex challenges such as climate change,
- **Sustainable Financing:** It is necessary to develop financing strategies that support long-term transition to a green economy. This could include investments in renewable energy, biodiversity conservation and resilient infrastructure. It must include sustainable funding for green skills development and to build the capacity of the TVET sector. Drawing on international experience, including from the UK, for example, they have an apprenticeship levy that funds on-the-job training provision for over 300.000 people a year.

-
- **Industrial Strategy:** All countries need a clear and holistic cross government strategy to identify and prioritise the industry sectors that will lead the transition to a low carbon economy. In the UK these include substantial investment in the power network and ramping up hydrogen production to facilitate a move away from reliance on natural gas as an energy source, rapid transition to electric vehicles with a requirement to increase battery production and change the skillset of vehicle manufacturers and maintenance technicians, removing carbon from energy intensive manufacturing, insulating homes and installing heat pumps to replace traditional central heating systems and adopting low carbon construction techniques for homes and commercial buildings. Mauritius would already seem to have individual plans for specific industries, but the level of overall coherence and connection with the TVET system is less clear.

Planning for Future Jobs

Effective Labour Market Intelligence is essential in drawing together the implications for jobs and skills of the industrial strategy described above. Components need to include:

- **Collaboration with Stakeholders:** Engagement with employers, industry associations, educational institutions, and workforce development agencies to collect real-time data on job vacancies, skills demand, and emerging trends.
- **Comprehensive Data Collection:** Expand data sources: Collect information beyond traditional employment statistics. Include data on gig economy workers, freelancers, and informal sectors. Commercially available online vacancy data can be a rich source of information on the rapidly changing labour market.
- **Regular surveys:** Conduct regular employer surveys to assess labour market dynamics, skill gaps, and employment patterns.
- **Quality Assurance and Accuracy:** Standardise data: Ensure consistency in data collection methods and definitions across regions.
- **Validation mechanisms:** Implement validation processes to verify data accuracy and reliability.
- **Timely Dissemination:** Make LMI accessible through online platforms, dashboards, and mobile apps.
- **Sector-specific reports:** Provide tailored reports for different industries and occupations.
- **Career Guidance:** Individual career planning: Provide LMI-based guidance to students and job seekers on the jobs and skills of the future.

In the UK, 17 **Sector Skills Councils** are funded by employers to provide a single voice on the skills needs of their industry sector. The Department for Education has a Future Skills Unit that conducts bi-annual surveys of employer skills needs and draws on extensive data sources. This has now been assimilated into a new apex skills body called Skills England. The Energy Department has been leading a Green Skills Task Force to pull together the priority jobs and skills implications of transition to a low carbon economy. Sector Skills Councils including Energy and Utility Skills and Cogent (Chemicals Industry SSC), have been leading players in specific workstreams.

Skills Hotspot and Competence Analysis

It is important to undertake more in-depth analysis of anticipated changes to occupations within each industry sector through occupational mapping and skills gap analysis:

- **Occupational Mapping:** An important starting point is to draw up a clear map of the main occupations in each industry sector, including career pathways from entry level jobs to senior executive roles,
- **Skills gap analysis:** It is then possible to use LMI to predict future job demands and skills requirements and from this, to identify skills shortage “hot spots”,
- **Routes to Competence:** Detailed competence analysis should be focussed on the occupational pathways where skills shortages are most significant and new training solutions are needed. This work needs to include standard setting to identify the tasks and competences required as jobs adjust to a low carbon future.

In the UK, Energy and Utility Skills has for example developed a map of the main occupations in the power sector, has used industry and government data to show the substantial growth in demand for specific occupations as a result of low carbon transition and has agreed a “heatmap” with its industry showing shortages and priorities for action. These include over 50 occupations that will see substantial growth. This is being used to review and adapt existing training provision, to develop new routes to competence for young people and to create a modular approach to adult upskilling.

Responsive Qualification and Curriculum Development

The pace of economic and industrial change now requires a more agile and responsive qualification and curriculum development process than has historically been the case at both national and TVET institutional level:

- **National qualification development:** Environmental education should become a required component of all TVET programmes, but this is not sufficient in itself. Each specific occupational study programme needs to be adapted to reflect the occupational change and skills “hot spots” being created by the shift to a low carbon economy. This will require close engagement with social partners including employers and training institutions and a regular process of review and updating.
- **Curriculum development by TVET Institutions:** The government should encourage TVET institutions to reach out to and partner with local employers and provide institutions with a degree of flexibility to adapt curricula at the local level to meet specific employer needs.

In the UK, Skills England works with each industrial sector to regularly update apprenticeship standards and create new TVET provision to meet changing needs. In addition, commercial qualifications providers, such as City and Guilds and Pearson, develop internationally recognised qualifications that are approved by the government.

Employer Engagement /Partnerships

A high level of employer engagement is a very important component of successfully delivering a low carbon transition. Employers need to be fully engaged at national and local level in providing labour market intelligence, highlighting skills needs and priorities and advising on qualification and curriculum development.

In the UK Sector Skills Councils bring together employers from their industry to establish a single coherent voice on skills needs and priorities, provide technical expertise to their sector on LMI, develop occupational standards and routes to competence and support employers in their dialogue with government and training providers on curriculum and qualifications reform. Similar sector-based skills bodies, led by employers could provide a valuable structure to strengthen industry dialogue. At the local/institutional level, Further Education Colleges reach out to local employers, build partnerships with them to deliver national programmes and have the autonomy to adapt these or develop alternative provision on a commercial basis to meet specific business needs. Business offers apprenticeships, which are paid jobs with formal training on and off the job. They also offer internships to full time college-based students, offer master classes, provide equipment and are able to adopt specific classes of students including company branding of college classrooms.

Institutional Capacity Building

TVET institutions need to carry credibility with the business community and be recognised by parents and students as places that deliver high quality learning. Important factors are:

- **TVET Leadership and Autonomy:** TVET Institutions need leadership and governance that sets out a clear mission, sense of direction and organisational values. An executive team that has the authority and autonomy to design a curriculum to meet national, provincial and local skills priorities. The ability to build a highly motivated and committed staff team focussed on the delivery of quality education and a supportive environment for learners. Leadership that looks to the future, understands the importance of greening the economy and is able to build long term relationships with key stakeholders including the business community. College managers in the UK have specific programmes to prepare them for leadership and further programmes when they become a college Principal.
- **Trainer Training:** TVET staff are often recruited because of their technical skills rather than their teaching expertise. Institutions need to provide coaching support against a development plan, as well as formal trainer training, to ensure their staff are able to use modern teaching techniques based on competence acquisition and action centred learning and have up to date knowledge of the industry and occupations they are teaching. The UK has nationally recognised teaching qualifications for those entering TVET from industry and colleges provide extensive teaching support including lesson observation, development plans, coaching sessions and expert advisers on use of teaching technology such as skills simulation and AI.
- **Facilities:**
It is difficult to build credibility with industry, or the confidence of parents that TVET is a positive choice, unless the buildings of the institution are modern and have industry

standard facilities and equipment. The UK has a specific capital programme to support the introduction of new training programmes, regions of the country have flexible budgets to encourage innovation to meet regional skills needs and encourage institutional collaboration. Colleges can borrow money from government at the UK base interest rate to build new facilities and can bid for grants to support the transition to low carbon by installing heat pumps and maximising the energy efficiency of buildings.

- **Specialisation.** Whilst initial skills development for young people is probably best provided at the local level, by each training institution, more advanced skills may be better provided through specialist institutions at sub regional level that have the facilities and expertise to meet specific sector skills needs. These could be new institutions or by building collaborative networks of existing institutions, encouraging regional collaboration so that each network member can specialise in areas of strength. In the UK, colleges are encouraged to collaborate in building partnerships with industry and universities to bid for funds to establish Institutes of Technology, providing higher level technological skills on a network basis.

Quality Delivery

All of the above aspects of the Roadmap are building blocks of a high quality TVET training delivery model that meets the needs of learners and supports industrial transformation toward a low carbon, sustainable future. One further aspect is important. TVET institutions should be subject to regular external inspection by an independent national agency that carries credibility because of the competence and experience of its staff. Inspections should focus on the quality of teaching and learning through lesson observation and the achievement of successful learning including retention, qualification attainment and job outcomes.

The UK uses the Office for Standards in Education, Ofsted, to conduct this role. Inspections are only announced a few days in advance. Teams of up to 12 inspectors spend a week in each college, interviewing staff and students, attending lessons and talking to stakeholders and employers. Colleges are graded as Outstanding, Good, Needs Improvement or Inadequate and reports are made public on the internet. If colleges become inadequate they are put into “intervention” by the government and if improvement is not made the leadership can be asked to stand down. This rigorous and highly visible model is challenging for colleges but ensures executive teams and governors constantly pay significant attention to quality, including self-assessment and improvement plans updated on an annual basis.

Monitoring /Feedback /Evaluation

It is important that the effectiveness of the TVET system and its adoption of green skills is carefully tracked, monitored and evaluated over time, so that judgements can be made about efficiency and effectiveness, social impact on learners and communities and impact on business and the economy.

Formative evaluation is also valuable to get early feedback on system changes such as the introduction of new green skills curricula, so that “course corrections” can be made in terms of policy and delivery before new systems become fully established.

Accurate and timely data is at the heart of the monitoring and evaluation process, together with clear performance indicators and effective IT systems to minimise complexity and bureaucracy in gathering and compiling data.

The UK Department for Education sets a wide range of performance measures against which it tracks spend, outputs and outcomes. These include starts, student retention, qualification outcomes, timely completion of apprenticeships and “positive outcomes” including jobs or higher-level study. Funding is only provided in exchange for accurate data from colleges. Colleges use a variety of commercial software to manage student progress and track outcomes. The Department for Education has a panel of college Principals who advise on the roll out of new programmes and on policy change. The Department conducts regular reviews of specific policy areas including to assess the Return-on-Investment ROI of the TVET system as part of making the funding case to the Treasury (Finance Ministry).

Ends.