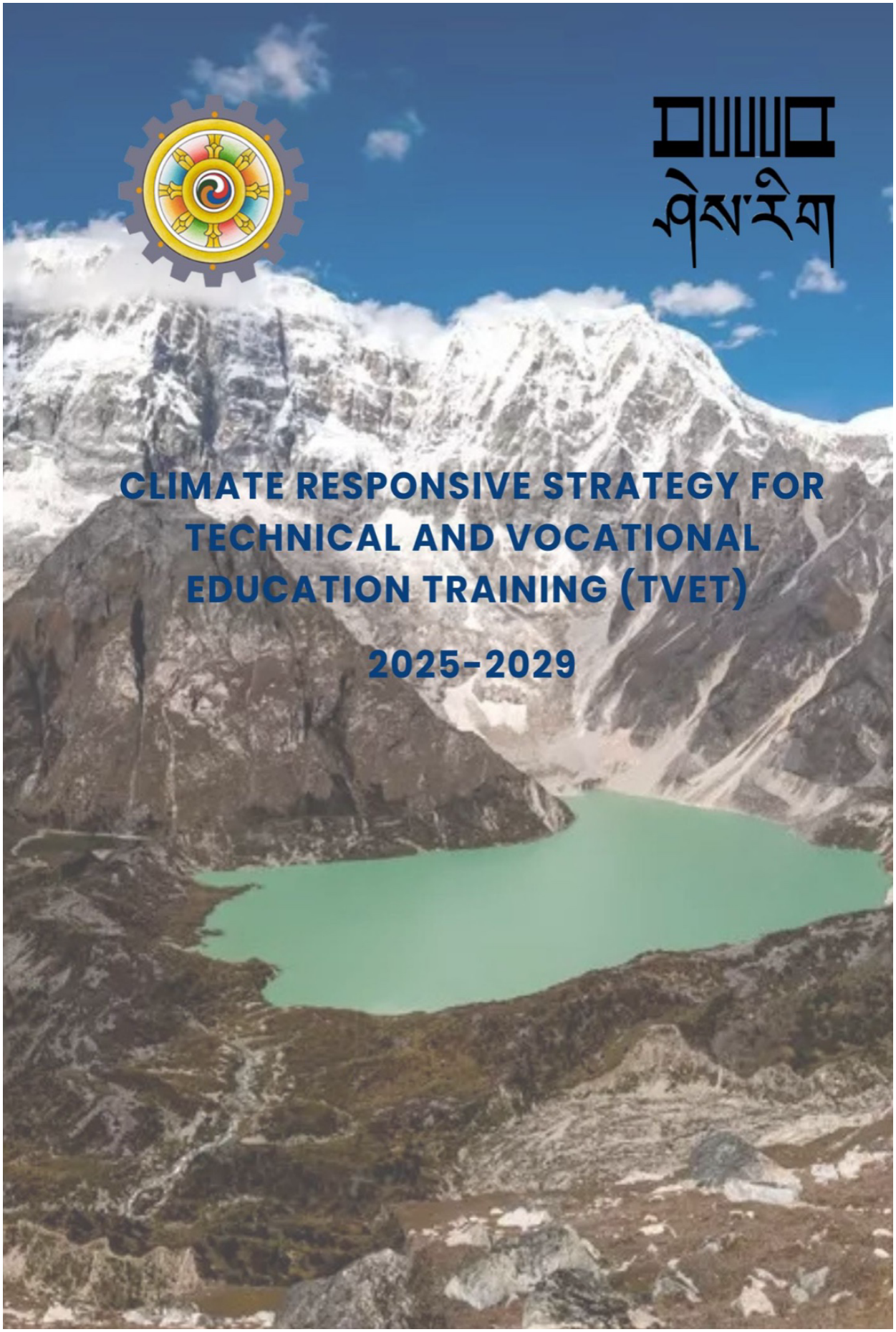

CLIMATE RESPONSIVE STRATEGY FOR TECHNICAL AND VOCATIONAL EDUCATION TRAINING (TVET)

2025-2029

Climate Responsive Strategy for Technical and Vocational Education Training (TVET)

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1. Background

As the effects of climate change increase globally, organizations across industries must adopt comprehensive operational strategies to enhance climate responsiveness. This approach mitigates environmental risks and strengthens resilience, sustainability, and long-term value creation.

The Climate Responsive Strategy for TVET is a roadmap to assist in establishing a work environment where our actions are viewed through a sustainability lens and our future footprints are considered. In line with the institute's objectives and strategic directions, our approach will take a dynamic, multidimensional approach.

Building a climate-ready adaptation is an urgent matter that requires immediate response. Many factors contribute to climate resilience. To mitigate and adapt to the challenges of climate change, it is imperative that we equip our workforce with relevant Technical and Vocational Education and Training (TVET) skills. Through proper planning and institutional frameworks, TVET programs can provide individuals with specialized expertise in renewable energy, sustainable agriculture, disaster resilience, and environmental management. By investing in TVET, we can foster a climate-resilient workforce, drive sustainable development, and ensure communities are better prepared to respond to the unfolding climate crisis. Effective TVET programs will not only support climate change adaptation but also create green job opportunities, stimulate innovation, and contribute to a low-carbon economy.

We believe vocational education and training has a key role in achieving a climate responsive environment incorporating various skills courses. Integrating climate change considerations into the curriculum, training programs, infrastructure, and collaborations is a necessary step in developing a Technical and Vocational Education and Training (TVET) climate-responsive approach. Additionally, we integrate waste management and other environmentally sustainable practices into our TVET curriculum. We want to consider the environmental impact to make sure we leave a better planet for our future generations.

Integrating climate change adaptation and mitigation into vocational education and training is the main goal of a TVET Climate Responsive Strategy. Through this strategy plan, we will connect with and empower our trainees, industries, communities and government agencies to build a platform to environment sustainability commitments. The strategic plan provides the basis for the development of national TVET courses in line with climate resilience.

2. Objective

A TVET Climate-Responsive Strategy aims to integrate climate change adaptation and mitigation into education and training systems to better equip the workforce with skills for sustainable development with the following objectives to

- Enhance Climate-Resilient Skill Development
- Integrate Climate Change responsive Education and skills development into TVET Curriculum
- Foster the growth of green skills and Strengthen Industry Partnerships for Green Job Creation
- Build Institutional Capacity for Climate-Responsive Training
- Enhance TVET institutions' climate-resilient infrastructure and encourage use of renewable energy

The effective implementation of these objectives will contribute to the creation of a skilled workforce capable of driving sustainable development, supporting climate change mitigation and adaptation, and fostering a green economy.

3. Guiding Principles: 4 Pillars of TVET Reform Plan

The guiding principles for the strategy will emphasize integrating sustainability and climate resilience into the education and training system. This can be effectively achieved through the 4 Ps of National TVET Reform Strategic plan: **People, Place, Product and Process.**

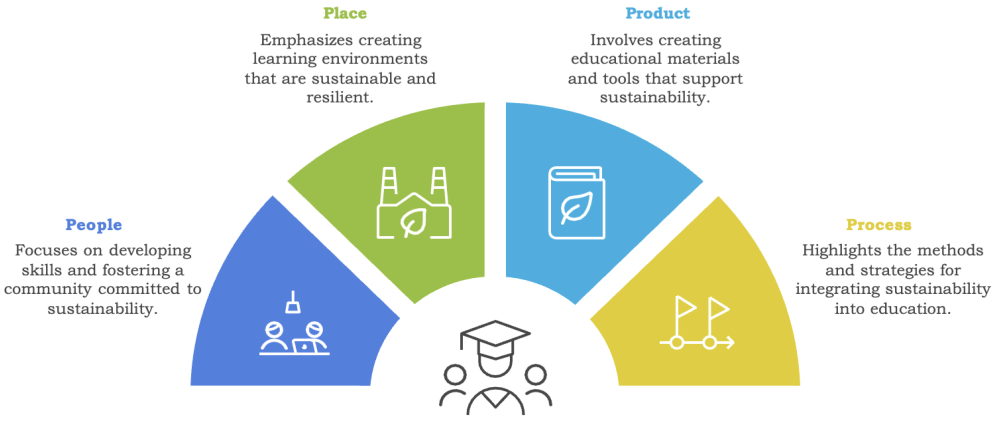


Figure 1: Four P's for TVET Transformation

3.1 Guiding Principle 1: People Transformation Pillar

TVET institutions play a pivotal role in equipping individuals with the skills needed for the emerging labor market, as industries shift toward sustainability and greener practices. Since the global economy increasingly focuses on addressing climate change, transitioning to renewable energy, and promoting environmental sustainability, TVET institutions are at the forefront of preparing a new generation of skilled workers for emerging green sectors. Building inspiring and visionary TVET leaders and managers, and world-class TVET professionals are some of the aspirations under the pillar.

The most fundamental aspect of the TVET transformation is the people- both the learners and the educators. In the context of a climate-responsive strategy, the individuals involved in TVET, including students, trainers, and educators, must be equipped with the knowledge and skills to tackle climate challenges effectively. Educating and empowering TVET trainees and leaders to teach environmentally friendly courses and also to nurture environmental sustainability is very crucial in this emerging climate challenge.

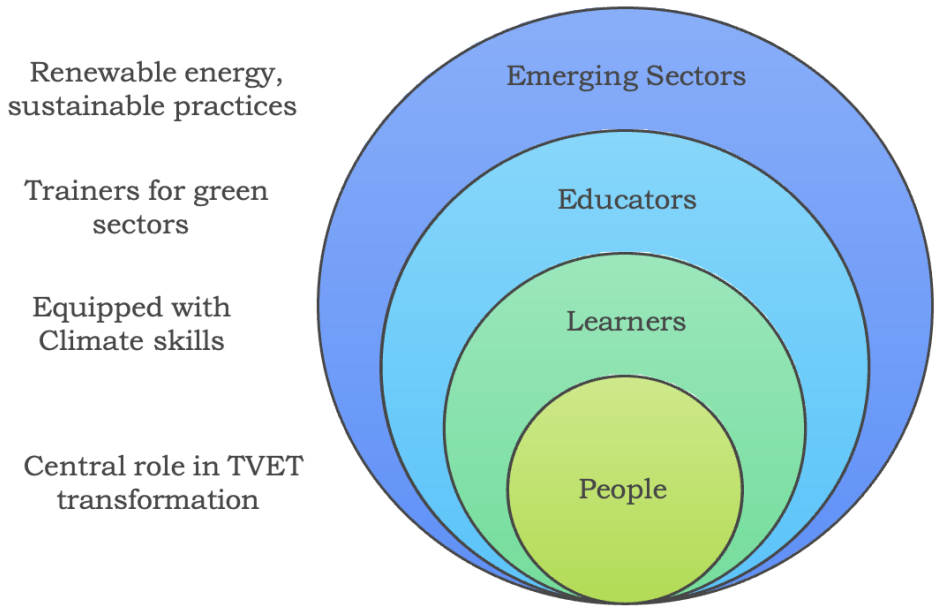


Figure 2: TVET Transformation for Climate Responsiveness

The ability of vocational institutes to provide hands-on, practical training in industries that are essential to the green transition, like renewable energy, sustainable agriculture, energy efficiency, and green construction, is one of the main contributions. These programs are made to meet the needs of employers who need workers with specialized technical skills in areas such as; installing

solar panels, retrofitting buildings for energy efficiency, and managing waste and recycling systems. Bridging the gap between educational theory and practical application, TVET institutions ensure that people are ready to enter and succeed in green jobs.

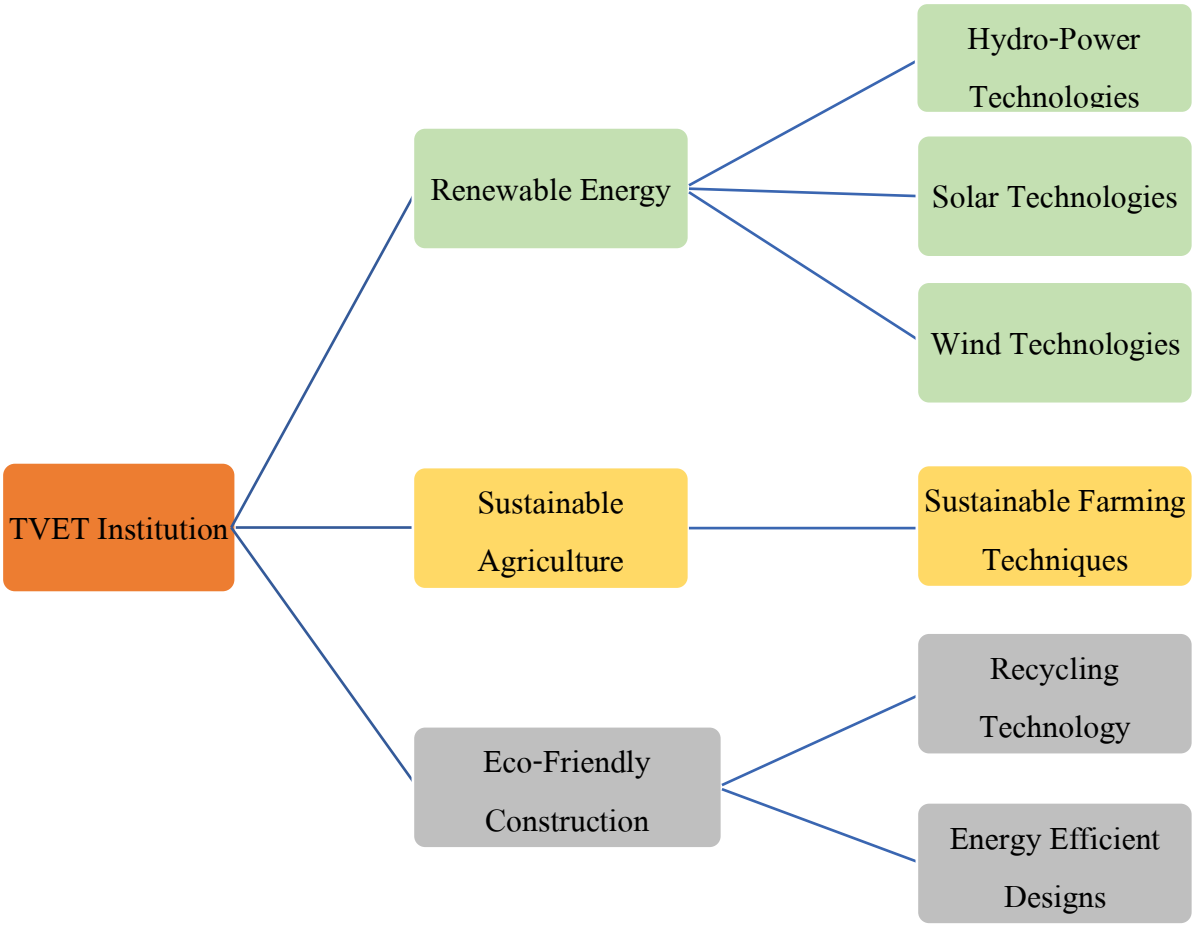


Figure 3: The Role of TVET Institutions in Training for Green Sectors

The trainers, through continuous professional development, will need to stay updated on climate science and sustainable practices, ensuring that learners receive relevant and up-to-date training. Trainees, in turn, will be the agents of change, equipped with the expertise to introduce sustainable practices into their respective fields and communities. In addition, the trainer must also undergo transformation to effectively teach and inspire the young generation.

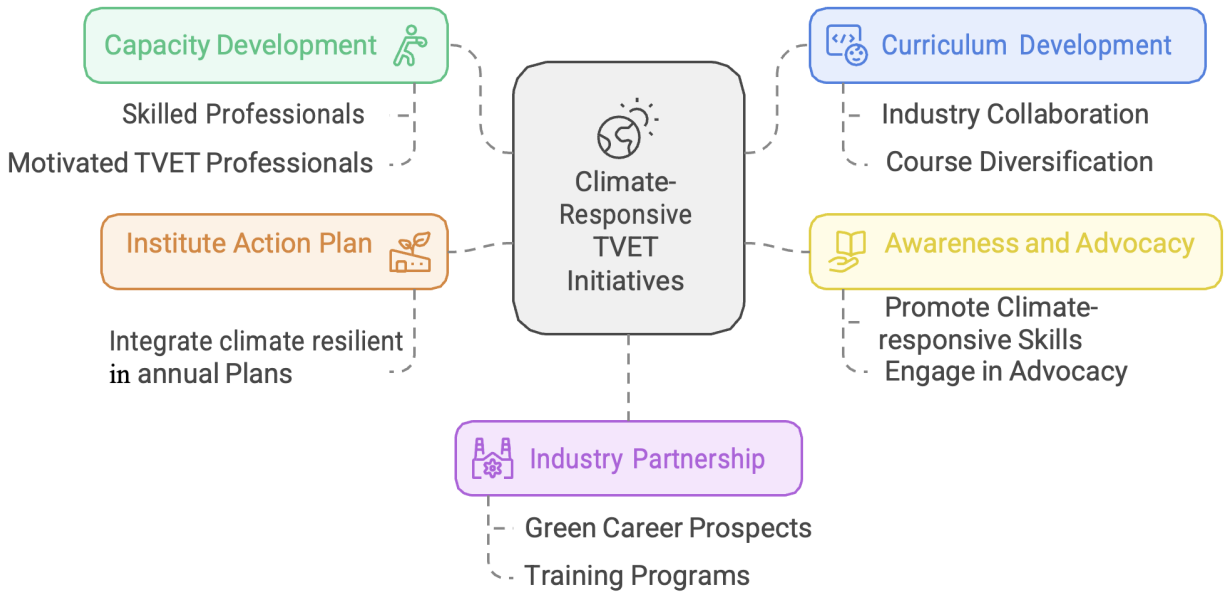


Figure 4: Approach on how to implement the activities

The TVET transformation is fundamentally about the people involved to drive the transformation and to equip the trainers and trainees with the necessary skills and knowledge to address climate challenges. The institutes play a significant role in fostering a workforce that is prepared for the demands of a sustainable future. The focus on emerging green sectors will not only benefit the environment but also create new opportunities for economic growth and development.

3.2 Guiding Principle 2: Place Transformation Pillar

TVET programs that are specifically dedicated to the environment and climate can more effectively equip people with skills that have a greater impact in a place. Aligning TVET programs with the specific environmental and climate-related requirements can more effectively equip individuals with skills that are more impactful in their working place. The skilling programs can be integrated on place-based approaches, which can directly address local climate challenges, ecosystems and socio-economic contexts.

Additionally, TVET institutions can promote a stronger bond with the local economy and ecosystem by involving local stakeholders in the planning and execution of these programs. Through the partnership, long-term employment development in industries that support climate adaptation and mitigation is encouraged and the training is made more sustainable in addition to being pertinent.

The workplace is a key factor in promoting the use of environmentally friendly resources, energy-efficient buildings, and educational materials. In order to create a sustainable and climate-resilient learning environment, the place transformation pillar will include the establishment of visually appealing infrastructures, interesting and multipurpose teaching and learning facilities, and institutes that are integrated with information and communication technology (ICT).

A place-based approach to the Climate Responsive Strategy for TVET ensures that skill development is regionally relevant, sustainable, and aligned with the local climate challenges, thus promoting both resilience and green economic growth.

The place-based approach can be done through the following activities;

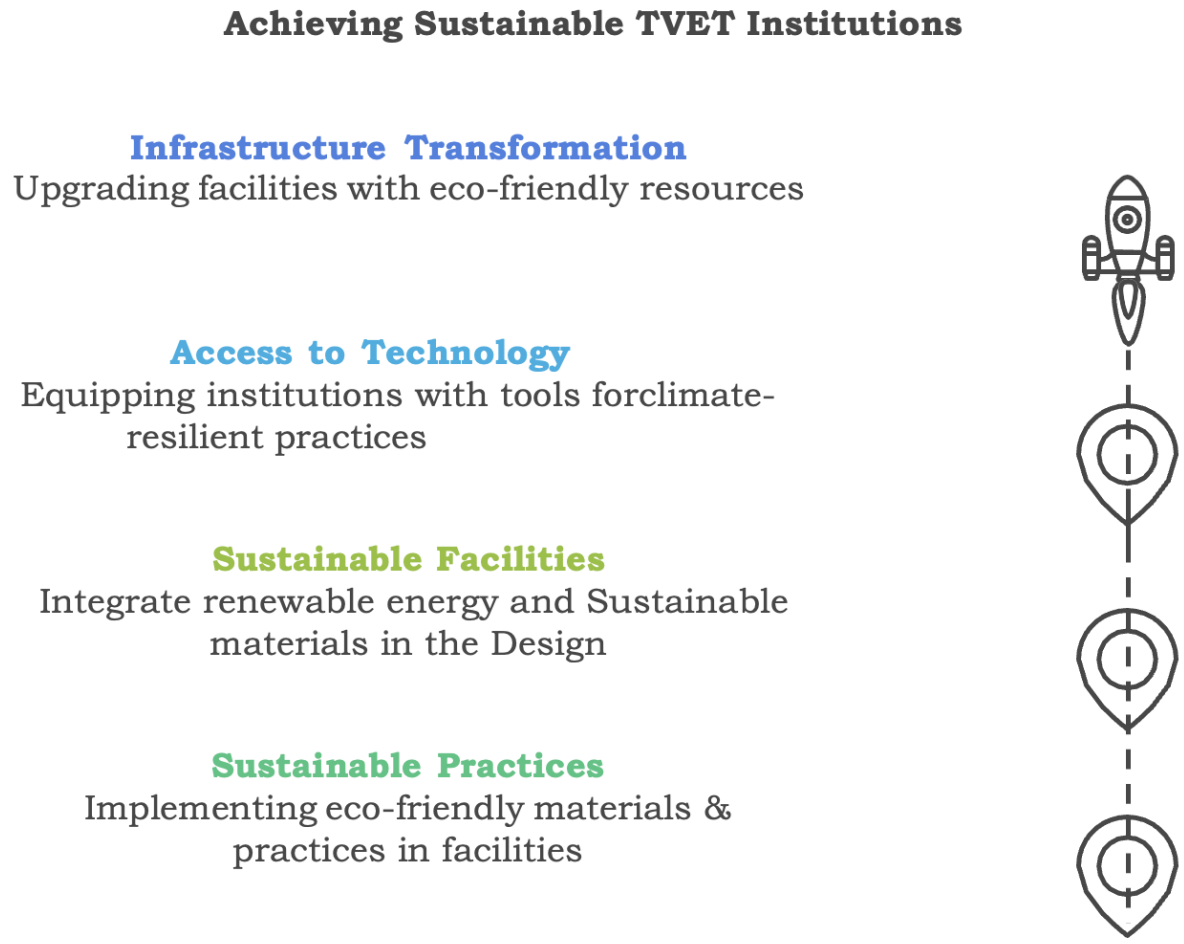


Figure 5: Achieving Sustainable TVET Infrastructure

3.3 Guiding Principle 3: Product Transformation Pillar

Product transformation plays a crucial role in climate responsive strategy by aligning technical education and training systems with skills necessary to address climate change challenges and driving the adoption of sustainable, low-carbon and climate resilient practices. The diversified TVET programs aligning to the 21st century economy needs, and to embrace the fourth industrial revolution (4IR) or industry 4.0 are core targets. The focus is more on digital and Internet Technology such as cloud computing and blockchain etc.

TVET's climate resilience plan is in line with the product transformation, which promotes the development of sustainable practices, technologies, and skills. In addition to promoting economic and environmental resilience, TVET institutions will help prepare the workforce to handle the challenges of climate change by emphasizing green and circular economy concepts and climate-resilient product design.

The Product transformation can support the Climate resilience strategy for TVET as detailed:

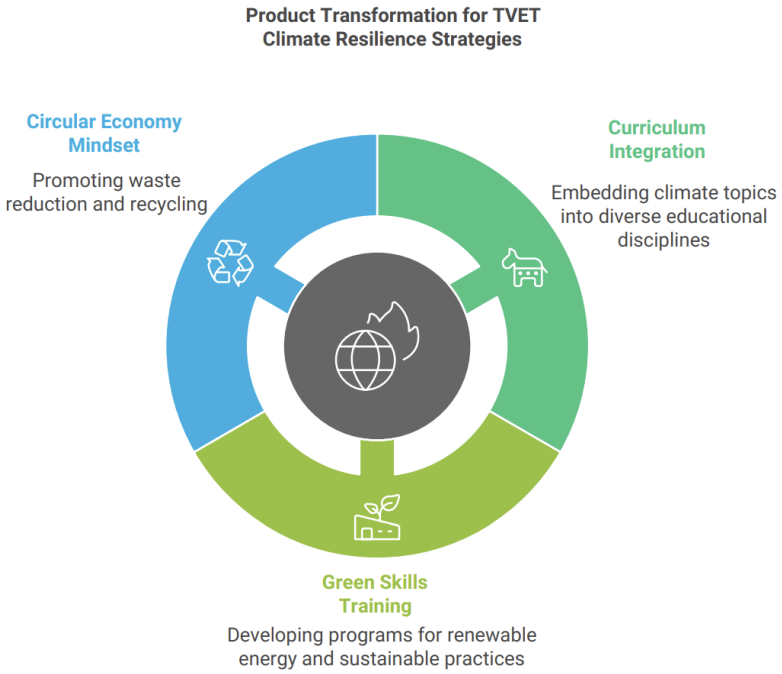


Figure 6: Product Transformation for TVET Climate Resilience Strategies

Through the backing of innovative educators who can incorporate sustainable practices into TVET programs, we hope to position ourselves to supply the skills required for the workforce of the future.

3.4 Guiding Principle 4: Process Transformation Pillar

Process transformation in TVET is key to creating a climate-responsive workforce capable of tackling the challenges posed by climate change. By revising curriculums, adopting sustainable practices, and building partnerships with industry, TVET systems can ensure that the trainees are not only skilled but also empowered to work in a green economy. This approach will enhance both individual resilience and collective climate adaptation, making TVET a critical pillar in global efforts to combat climate change.

Streamlining clear governance and institutional mechanisms to deliver quality and responsive TVET programmes, and ensuring clear and flexible learning and career pathways is an essential part of process transformation. To achieve this, below are the key components:

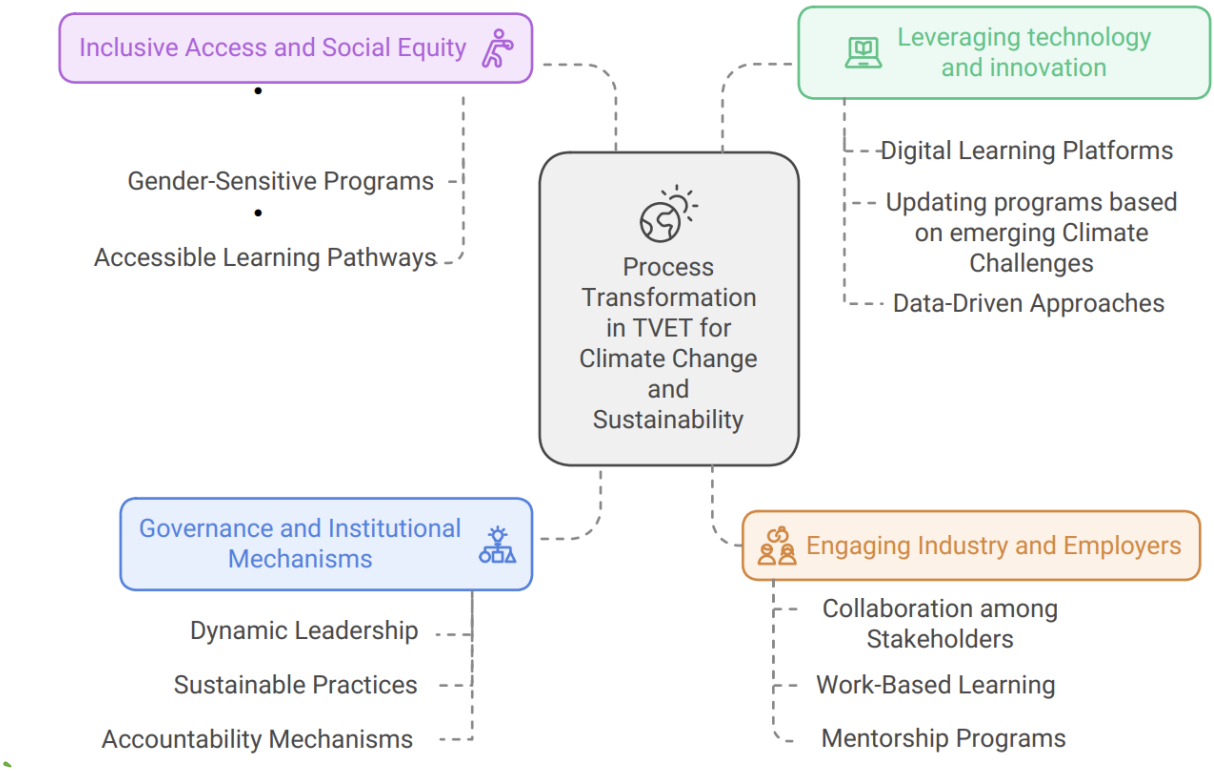


Figure 7: Process Transformation in TVET for Climate Resilience

The focus should be on adapting educational frameworks to address both climate change challenges and the need for a skilled workforce in green and sustainable industries. This requires clear governance structures, flexible learning pathways, and deep collaboration with industry and other stakeholders. Understanding and learning more from internationals about the climate concerns and their solutions is also crucial in order to match skilling areas with the establishment

of institutional links and collaborations at the national and international levels. By aligning training with both environmental goals and labor market demands, TVET systems can play a central role in fostering resilience and sustainability at the local, national, and global levels.

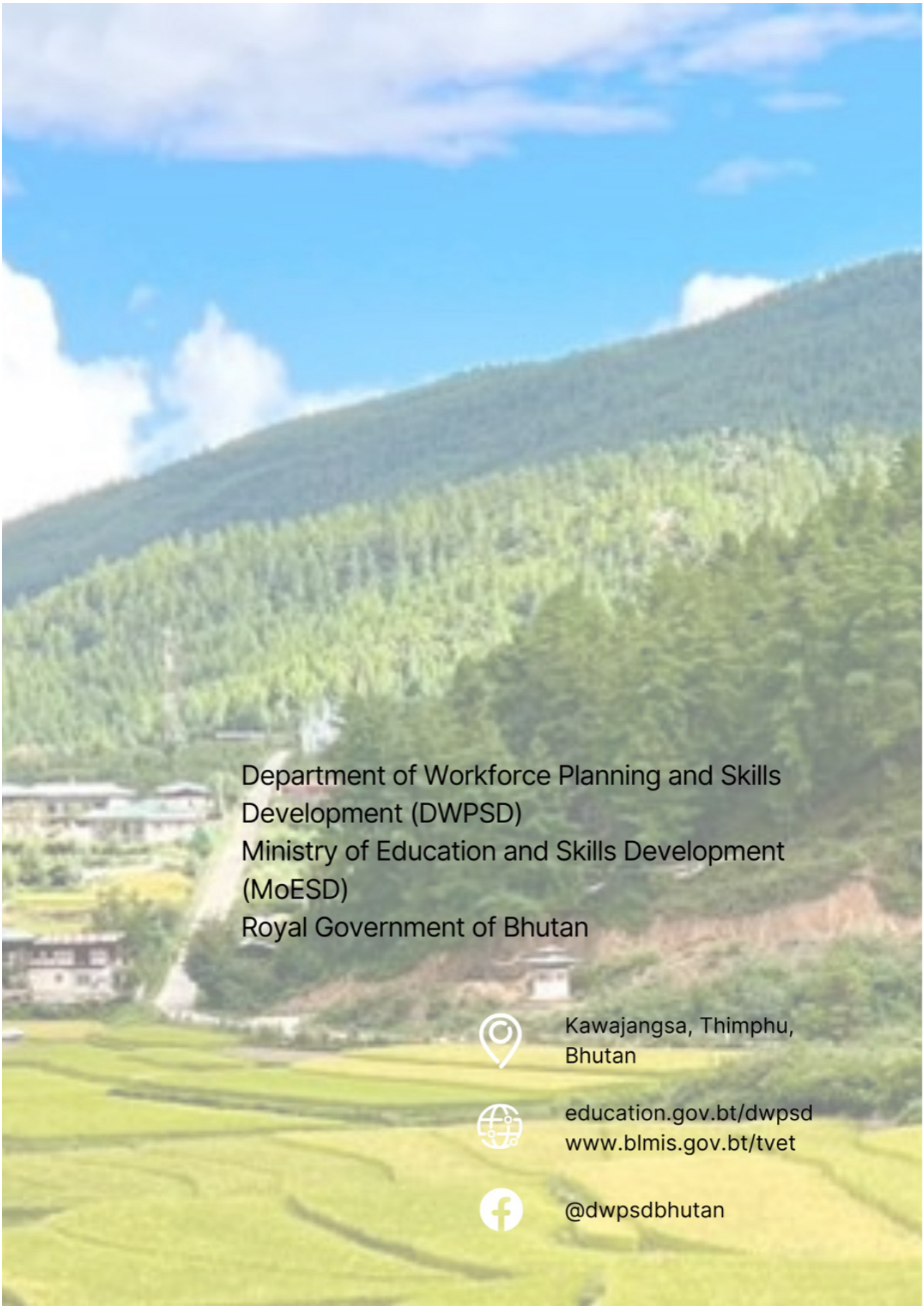
4. Implementation Plan

The Department of Workforce Planning and Skills Development (DWPSD), Ministry of Education and Skills Development (MoESD) will principally oversee the strategic plan, which is slated to be implemented between 2025 and 2029 (Table 1). However, coordination with other MoESD departments, the Ministry of Industry, Commerce, and Employment (MoICE), industry associations, and development partners is necessary for successful implementation. A climate-responsive TVET strategy can equip individuals with the skills needed to address climate challenges, promote sustainability, and foster resilience in communities. By implementing this comprehensive approach, TVET institutions can play a crucial role in shaping a sustainable future.

The department will collaborate closely with Technical Training Institutes (TTIs) and other important stakeholders to guarantee a thorough monitoring and evaluation procedure. Through this partnership, they will evaluate the plan's operations annually to determine their successes, difficulties, and overall impact. The Department of Workforce Planning and Skills Development will compile monitoring and evaluation findings into reports, sharing them transparently with stakeholders. They will make strategic interventions to support the plan's implementation, ensuring it is on track and achieves desired outcomes.

Table 1: Implementation Plans 2025-2029

Strategic objectives, activities, and indicators	Unit	Baseline	2025	2026	2027	2028	2029
Guiding Principle 1: People Transformation Pillar							
Capacity Development		2024 (baseline)					
TVET trainers and Professionals trained in climate resilience initiative	nos						
TVET Trainers providing Climate resilience program	nos						
Guiding Principle 2: Place Transformation Pillar							
Sustainable Infrastructure							
Integration of Climate resilient technology in institute infrastructure design	nos						
Access to Technology							
Equip institutions with climate resilient technology	nos						
Sustainable Practices							
Implementing climate resilience materials and practices	nos of initiative						
Guiding Principle 3: Product Transformation Pillar							
Green Skills Training							
TVET graduates skilled in climate resilience programs	%						
climate resilience Curriculum developed	Nos						
Fostering Innovation Guiding Principle 4: Process Transformation Pillar							
Inclusive Access and Social Equity							
Female enrollment in climate resilient program	%						
Accountability mechanism estd	Date						



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