PORT ELIZABETH
COLLEGE

GREEN SKILLS DEVELOPMENT

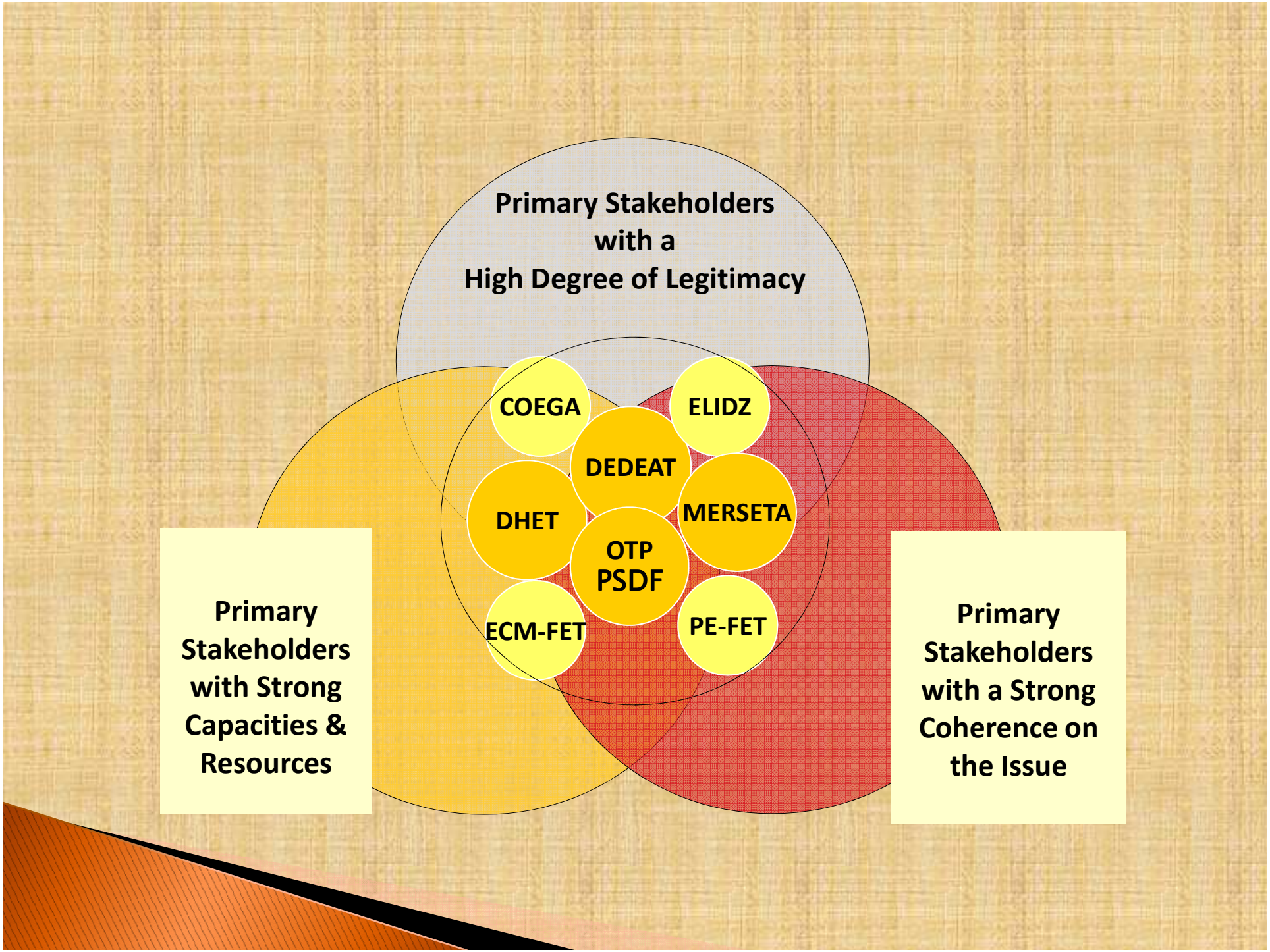
PORT ELIZABETH TVET COLLEGE

LEIPZIG – JULY 2013

1. BACKGROUND

- GIZ link with Port Elizabeth College
- TVET Scenario 2011/2012
- Stakeholder Identification
- Investigate German Dual System – Renewable Energy
- Needs Analysis
- GIZ Advisors Appointed
- Funding Proposals


Khayriathu Goodman
MATIBO


Primary Stakeholders with a High Degree of Legitimacy
COEGA
ELIDZ
DEDEAT
DHET
MERSETA
OTP
PSDF
ECM-FET
PE-FET
Primary Stakeholders with Strong Capacities & Resources
Primary Stakeholders with a Strong Coherence on the Issue

2. QUALIFICATION DEVELOPMENT

INTEGRATION OF R.E QUALIFICATIONS AND CAPACITY BUILDING

Assessment: Aptitude Test

Basic Level

Renewable Energy Installation and Maintenance

Module: Solar Water Heating (SWH) and Heat Pumps:	Module: Photo Voltaic (PV):	Module: Wind turbines:
Solar heating systems (low and high pressure), heat pump systems, mounting, connecting, OHSAS	DC systems, AC systems, PV systems, inverters, battery systems, grid connections, mounting, connecting, OHSAS	DC systems, AC systems, PV systems, inverters, battery systems, grid connections, mechanical, mounting, connecting, OHSAS

Entry level for all Modules

NCV L4 Graduates Civil Engineering Construction, Electrical Infrastructure Construction, Mechatronics, Engineering and Related Design.

Qualified Electricians and Trade Tested Plumbers

2. QUALIFICATION DEVELOPMENT

Assessment post Basic Level/Bridging Course or
for re-skilling entrants

Advanced Level

Renewable Energy Client Advisor and Planner

Content

Customer advisory, rebate and refund systems (e.g. ESKOM), legal frameworks EE/RE, ROI calculations, Sizing/system planning of (mixed) appliances, practical experience to install

Entry levels

Basic Level Renewable Energy Appliances Installer and Maintainer, Graduates or Technicians in the relevant fields (Higher Education Qualification). Technicians need an additional bridging course to fill the practical experience gap.

3. CAPACITY BUILDING OF STAFF

- Top Management Exposure
- Lecturer Introduction to Green Skills
- Intensive training – P.V.s and Solar Geyser
- Greening of Colleges Initiative
- Further development of staff
- Green Skills – National Engineering TVET Programmes

4. TRANSFERING EXPERIENCES FROM SOUTH AFRICA

- Partnerships
- Research
  - needs
  - viability
  - sustainability
- Buy in from all Stakeholders
- Funding
  - Physical Resources
  - Staff (appointments and developments)
  - Development of learning material
- Quality Assurance (Accreditation)
- Be flexible
  - PV / Wind turbine
  - LP & HP Solar Geyser Installation
  - BEAT (Building Energy Auditor Training)

5. EASTERN CAPE R.E. PROJECTS

Project name	Province	Municipality	MW
Window 1	Wind		
MetroWind Van Stadens	EC	Nelson Mandela Bay	26.19
Red Cap Kouga – Oyster Bay	EC	Kouga	77.60
Dorper Wind Farm	EC	Inkwanca	97.00
Jeffreys Bay	EC	Kouga	134
Cookhouse	EC	Blue Crane Route	135

Project name	Province	Municipality	MW
Window 2	Solar PV		
Dreunberg	EC	Gariep	69.6
Window 2	Wind		
Amakhala Emoyeni	EC	Nxuba (near Bedford)	137.9
Tsitsikamma	EC		94.8
Waainek	EC	Makana	23.4
Grassridge	EC	Tsolwana	59.8
Chaba	EC	Great Kei	20.6