



Forging Links between Industry and Academia
ECB Presentation at the NUST EF Research Day

by
Foibe L. Namene
Chief Executive Officer

Windhoek, 27 July, 2018

PRESENTATION OUTLINE



- Relevance of NUST Research Activities
- Industry scale Projects
- Collaborative Value Addition
- Practical Challenges
- Areas of Potential Collaboration
- Recommendations on Strengthening Ties
- About the ECB (Mandate and Core regulatory Activities)

RELEVANCE OF NUST RESEARCH ACTIVITIES



▶ **Dept. of Electrical and Computer Engineering**

- Solar Energy Potential and PA of CSP Technologies
- PA of Grid-tied PV System

▶ **Dept. of Mechanical and Marine Engineering**

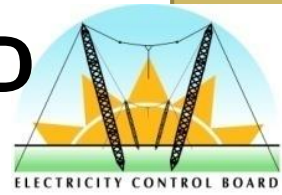
- Improving the revenue collection processes for Namibian Local Authorities

INDUSTRY SCALE PROJECTS

- ▶ **SECURITY OF SUPPLY (Gx Adequacy): DECE**
 - Resource Assessment & CSP Plant Operations
 - REGIS – Capacity Caps & Intermittency Mitigation
 - Integrated Resource Planning (IRP) for various sectors
 - Application of modelling tools for development & review
- ▶ **UTILITY SUSTAINABILITY: DMME**
 - Revenue Protection – Technical, ICT & Commercial aspects
 - Ring-fencing of sector business – undoing X-subsidization

INDUSTRY PERFORMANCE STATISTICS:

COLLABORATIVE VALUE ADDITION IN R&D



- ▶ Identifying Industrial/ Commercial Relevance / Value
- ▶ Upscaling to Industrial level research
- ▶ Upscaling to National and Regional Levels & beyond
- ▶ Resource Mobilization
- ▶ Targeted Deliverables

PRACTICAL CHALLENGES

- ▶ Prohibitive Workloads (as perceived by both parties)
- ▶ Lack of appreciation of mutual benefits
- ▶ Absence of initiatives from both parties
- ▶ Research relevance
- ▶ Disparities in levels of risk

AREAS OF POTENTIAL COLLABORATION

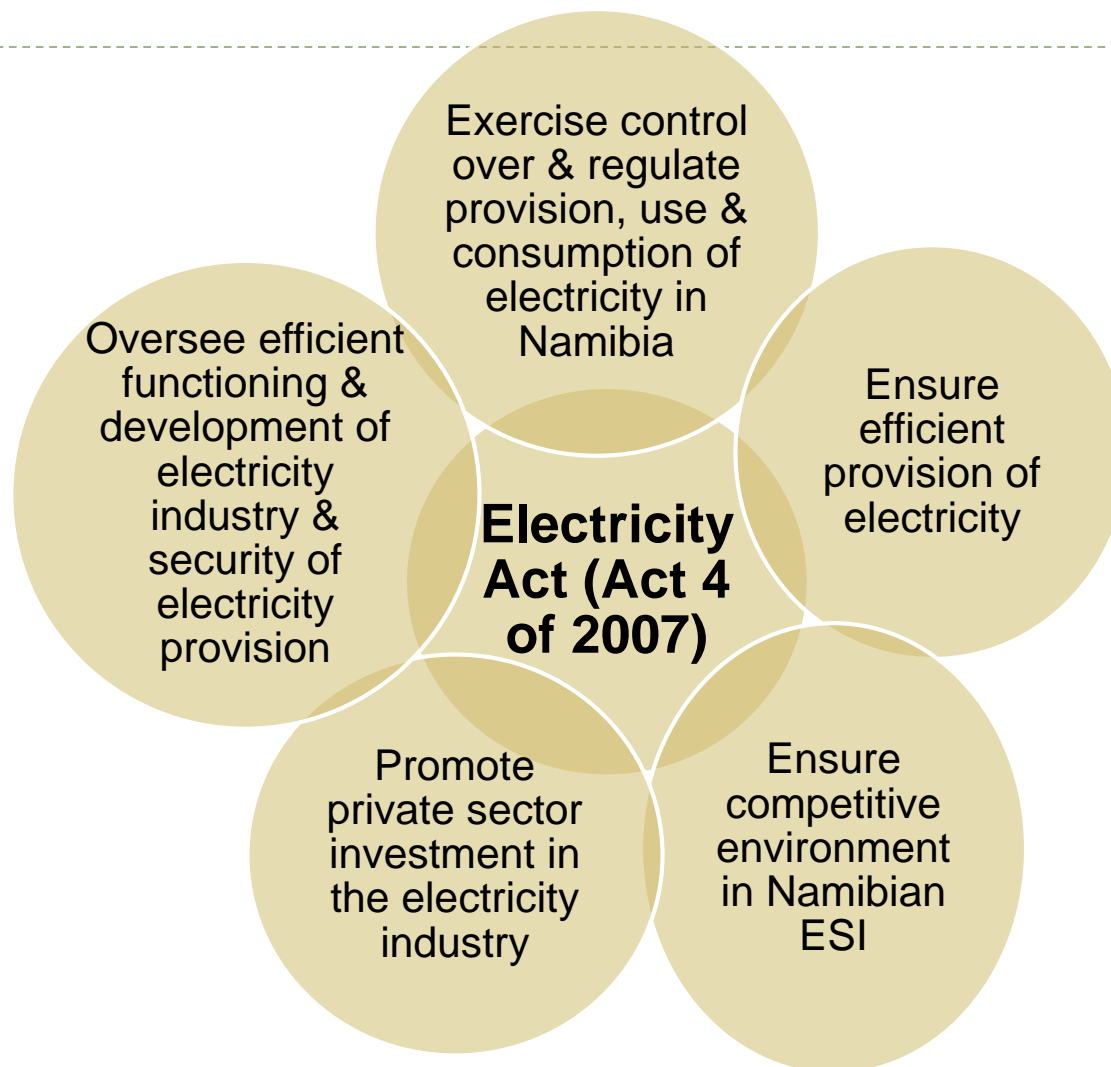


- ▶ Joint R&D
- ▶ Joint Publications
- ▶ X-pollination of ideas through short/special courses
- ▶ Consultancy Services
- ▶ Employment, Internships

RECOMMENDATIONS ON STRENGTHENING TIES

- ▶ Industry- Budget to support relevant R&D
- ▶ Academia- Conduct relevant R&D Activities
- ▶ Proactive Engagement strongly recommended
- ▶ Industry will consider requests if approached formally
- ▶ For example Industry can readily donate decommissioned equipment for use as training aids

ECB Mandate



- In accordance with prevailing Government policy

Core Regulatory Areas

Economic Regulation
Tariff setting

Technical Regulation
Standard setting &
audits/inspections

Licensing
Issue, transfer, cancel
licences

Oversight and approval
of major GX, TX & DX
infrastructure projects

Create level playing
field for industry
participants, utilities,
IPPs & other investors

Mediation between
licensees and their
customers/prospective
customers

Primary regulatory focus for 2018/19

- Industry Performance Improvement
 - Commitment to Efficiency and QoSS Standards
 - Performance Indices for Gx, Tx and Dx
 - Security of Supply
 - Industry Reforms
 - Infrastructure Maintenance
 - Licensee Compliance
 - Quality of Service delivery to end users

Commitment to Efficiency and QoSSS



- ▶ Industry embraced QoSS Standards Implementation
- ▶ Useful successes and challenges experienced
- ▶ Objective now is to improve on QoSS Reporting
- ▶ Eventual aim is implementing systems incorporating practical KPI's for the Industry
- ▶ Visual network audits gained momentum for past 4 years.
- ▶ **Performance indices covering Gx, Tx, and Dx**
- ▶ Hence the proposal for industry performance indices highlighted in subsequent slides.....

Industry Performance Indices for Gx, Tx & Dx



- a. System Average Interruption Duration Index (SAIDI)
- b. System Average Interruption Frequency Index (SAIFI)
- c. Customer Average Interruption Duration Index (CAIDI)
- d. Customer Average Interruption Frequency Index (CAIFI)
- e. Average System Interruption Duration Index (ASIDI)



Industry Performance Indices.....Cont'd



- a. Average System Interruption Frequency Index (ASIFI)
- b. Average Interruption Duration (AID)
- c. Average Interruption Frequency (AIF)
- d. Transmission System Availability (TSA)
- e. Plant Availability
- f. Forced Outage Factor (FOF)
- g. Scheduled Outage Factor (SOF)

THANK YOU

www.ecb.org.na

Tel +264 61 374 300

Fax +264 61 374 305

P.O. Box 2923

Windhoek

Namibia