South Africa National Product Registration System for Appliances

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Large Residential Appliances in SA

- Dishwashers: 1.3 million p/a
- Washer-Dryers: < 0.1 million p/a
- Washing Machines: 0.5 million p/a
- Tumble Dryers: < 0.1 million p/a
- Electric Ovens: 0.6 million p/a
- Fridges and Freezers: FF 1.3 million p/a, F 0.3 million p/a
- Water Heaters: 0.5 million p/a
- Air Conditioners: 0.3 million p/a
- Lights Bulbs
- Audio-Visual Equipment
South Africa’s S&L Programme

- Supported by Energy Efficiency Strategy
- Successful GEF application ($4.1m) 2011
- MEPS Legislation in 2015 & 2016 (water heaters)
- National Regulator for Compulsory Specifications uses the 3rd party conformity assessment approach
- The NRCS Act views public safety, health and environmental protection with the same lens
NRCS Process Flow

- Established process
- No investment or lead time to create a Regulator
- Complements H&S registration requirements
- Sustainable funding model
However,

- **Staff training required**
- **Existing IT system not fit for purpose – old and H&S centric**
  - Long LoA processing times – at one point >120 days
  - Combination of online and paper
  - Manual processes (errors, loss of data)
  - No data repository
  - Poor reporting
  - Inefficient market surveillance
- **Industry approached Minister and Parliament to intervene**
PRS – The Answer?

- International expert to develop technical specs
- ToR issued for a system developer
- Open source software
- Staff and industry training

www.applianceregistrationdatabase.org.za
PRS is a Game Changer

Applicant Portal
- Applicants can submit the relevant supporting documents to acquire LOA

Regulator Portal
- Evaluators can view, evaluate and make decisions on applications submitted

Public Portal
- The public can check LOA’s of an appliance and compare energy efficiency

Shifts responsibility to applicant, with basic intelligence and automated responses
Progress to Date

- Online registration database is live (May 2021)
- LoA application processing times have dropped from ~70 to ~15 days
- NRCS officials would like the system to be replicated for H&S applications
- After initial concerns of revised application approach, industry recognises the benefits of an automated system
Still to do

- Data analysis and reporting
- Risk based compliance
- Public access to database
- Updating energy label with QR code
Evolution of Energy Label

Proposed
Change must be managed

- Ministries must remain up to date with technology advances
- Regulator staff must be convinced of the benefits
- IT department must be on board
- Business process (re) engineering is a crucial intermediary step
- Industry must be dealt with fairly but **firmly**
THANK YOU
SA’s S&L Impacts and Remaining Potential

- 7.1 TWh (2030) - the total avoided capacity of a 1.1 GW plant
- Lighting MEPS additional 1.5 TWh by 2040 (250 MW plant).
- HH utility bills will ↓ $1.2b 2030.
- HH bills will be ↓ $54 by 2030.
- CO₂ ↓ 6.8Mt/year 2030 (= Zambia)
- 10b litres of water/year (2030)
- Particulate emissions ↓ by 3 kt, Sulphur oxide ↓ 2.5 Mt, Nitrogen oxide emissions ↓ 24 kt