

GREEN JOBS



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Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA

IDD

Chief Directorate: Technical Infrastructure



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PRESENTATION STRUCTURE

- ❖ **High level alignment 3**
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- ❖ **Potential Green Jobs KRA and links**
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 7. **Infrastructure and Buildings**
 8. **Tourism and Hospitality**
- ❖ **Way Forward**



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Framework for South Africa's Response to the International Economic Crisis

❖ High level alignment

- During formulation of the 'Framework for South Africa's Response to the International Economic Crisis' the partners stressed the opportunities opening up in industries and government programmes that seek to combat the negative effects of climate change
- The Scaled up Industrial Policy Action Plan, containing Policies, Strategies and Programmes for the development of manufacturing and related sectors of the economy to contribute to the creation of decent jobs, value-addition, and competitiveness provides a home for promotion of green jobs



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Definition and potential

❖ Definition

- “... work that contribute substantially to preserving or restoring environmental quality. Specifically, but not exclusively, ‘Green Jobs’ include jobs that help to protect ecosystems and biodiversity; reduce energy, materials, and water consumption through high efficiency strategies; de-carbonize the economy; and minimize or altogether avoid generation of all forms of waste and pollution” (UNEP)

❖ International benchmark

- American environmental groups has estimated that 40% of the jobs created by the ‘stimulus package’ will be ‘green’ and will contribute to decreasing energy consumption, lowering oil demand and switching to renewable sources.

❖ SA Environmental Goods and Services (EGS) Sector

- It is estimated that a minimum of 228 000 jobs exist in the sector supplying the South African economy with environmental goods and services (EGS). The market for green goods and services has the potential to grow 10-12% per year for next 5 years with support.



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TRADE

❖ **TRADE AGREEMENTS**

- Trade agreements offer 'environmental assistance' – the dti do not utilise sufficiently

❖ **TECHNICAL BARRIERS TO TRADE (TBT)**

- Environmental TBT impair trade competitiveness

❖ **The dti Role and Support**

- Bridge the gap between TBT and assistance offered



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TECHNOLOGY AND INNOVATION

❖ IMPORTS / TECHNOLOGY TRANSFER

- 'BAT' vs 'BAAT'

❖ R&D

- By industry/user for industry/user

❖ The dti Role and Support

- Innovation and Technology



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WASTE MINIMISATION

❖ MATERIALS EFFICIENCY

- Produce more with less. Mechanised or labour intensive

❖ WASTE MANAGEMENT COST DRIVERS

- Volume of waste exceeds available landfill space
- Scarcity and cost of materials
- Waste management tariffs
- Legislation

❖ The dti Role and Support

- National Cleaner Production Centre (NCPC)



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WASTE MANAGEMENT AND RECYCLING

❖ COST

- Increasing cost of waste – to landfill option
- Re-use, recover, recycle now make financial sense

❖ ECONOMIES OF SCALE

- Waste volumes nearly 67m m³. Provide feasible options for recycling.

❖ POLICY DRIVERS

- DEA National Waste Management Strategy (NWMS) :
- Measures for recovery, re-use and recycling of materials
- National recycling programme envisaged
- Pilot programmes exist

❖ THE dti ROLE

- Technical support through NCPC
- Poverty alleviation potential of proposed National Recycling Programme
- 100 000 new jobs can be created.



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CLIMATE RELATED

❖ GREEN HOUSE GAS (GHG) MITIGATION

- GHG (CO₂, methane etc) distort climate
- Severe droughts, storms, rainfall distortions

❖ REDUCE THROUGH RENEWABLE ENERGY (RE) [CDM]

- Energy mix: less fossil fuels (coal, oil)
- RE (wind, solar (1)electricity (2)heat(SWH), hydro)
- Energy security, advanced manufacturing

❖ REDUCE THROUGH ENERGY EFFICIENCY (EE) [CDM]

- **Best EE practice: Energy systems optimisation**
- IEE Project **Financial assistance required for retrofitting**



EXAMPLE OF GREEN JOBS IN RENEWABLE ENERGY

❖ Options:

- Methane to electricity (Marian Hill +)
- Biogas digesting to electricity (Suitable for small scale eg farm waste)
- Mixed waste to electricity (Pyrolysis) (Municipal dump scale)

- Investment in construction. **Equipment imported.**
- If CDM CERs approved, carbon credits after about 3-6 years
- Render **manufacturing construction, technical and engineering green jobs**
- Theoretically the landfill of each village can provide sufficient electricity for residential needs of that village; industrial needs will require addition electricity
- **TEO interested (Francois Truter) in boosting CDM**



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WATER

❖ WATER SUPPLY & UTILISATION

- Pricing
- Right of access: nature, humans, industry (mining, farming, manufacturing, tourism)

❖ WATER CONSERVATION AND QUALITY

- Security: sustainability of water supply, rivers, dams, boreholes, oceans as national assets
- Minimise demand, maximise efficiency - saving
- Purification - cost



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INFRASTRUCTURE AND BUILDINGS

❖ REGULATION

- Compulsory Building Standards for structures; and
- For lighting, heating, energy efficiency
- Programmes for existing buildings needed

❖ BUILDING MATERIALS

- Safe use of previously used materials
- Minimise virgin materials, maximise recycled
- Green buildings – cost saving



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TOURISM AND HOSPITALITY

❖ **COMPETITION & BENCHMARKING**

- Maintains high standards, customers from environmentally sensitive countries

❖ **BALANCE COST and SERVICE**

- Innovative and cost saving measures
- Green Certification & Communication
- Green education for staff



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LINKAGES

- CDM – Carbon Credits
- IDD: EGS sector
- Innovation and Technology : refine, innovate, indigenous knowledge, technology transfer
- TEO - incentives
- Regulatory alignment
- TBT eg border taxes
- Local manufacturing



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B C D E F G H I J K L M N O P Q R S T U V

GREEN JOBS KPA

ED ABILITY N JOBS TION	NATURAL RESOURCE MANAGEMENT	WATER TRADE	INNOVATION & TECHNOLOGY	WASTE MINIMISATION	WASTE MANAGEMENT, RECYCLING	LOW CARBON INDUSTRIAL DEVELOPMENT	WATER	INFRA- STRUCTURE & BUILDINGS	HOSPITALITY, TOURISM	FARMING, FORESTRY & FISHERY	MINING	HEALTH
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LP/IA												
TREASURY												
EA												
WA												
EN												
TRANSPORT												
OL												
PE												
the dti- TI, PAP, TEO		Activity <	Activity <	Activity <	Activity <	Activity in sectors <	Activity <	Activity <	Initiate activity <			
DA												
MINING												
TOUR												
HEALTH												
OTHER												

THE DTI IS PROMOTING GREEN JOBS AND COULD INCREASE (<) EFFORT

- 1. Trade
- 2. Technology and Innovation
- 3. Waste Minimisation
- 4. Waste Management & Recycling
- 5. LOW CARBON INDUSTRY: Energy Supply & Energy Efficiency
- 6. Water
- 7. Infrastructure and Buildings
- 8. Tourism & Hospitality

actions (1) Standardise KPA for Green Jobs TOR. (2) Develop coordinated action plan (3) Allocate responsibilities and resources



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Next steps

1. Align with National POA
2. Integrate in existing economy
3. Green Jobs Sector, capacity
4. Incentives (EE, CP, RE)
5. Green Procurement
6. Green technology transfer
7. R&D – incremental improvements + innovate
8. Partner with advanced economies