

UNITED NATIONS

Economic and Social Commission for Western Asia



Environmental goods and services in the ESCWA region **Opportunities for SMEs**

Sustainable Development and Productivity Division
United Nations Economic and Social Commission for Western Asia



Outline of presentation



1. Environmental problems and priorities in the ESCWA region
2. Environmental goods and services (EGS) - characteristics and subsectors
3. Key EGS opportunities for SMEs in the region
4. Recommendations



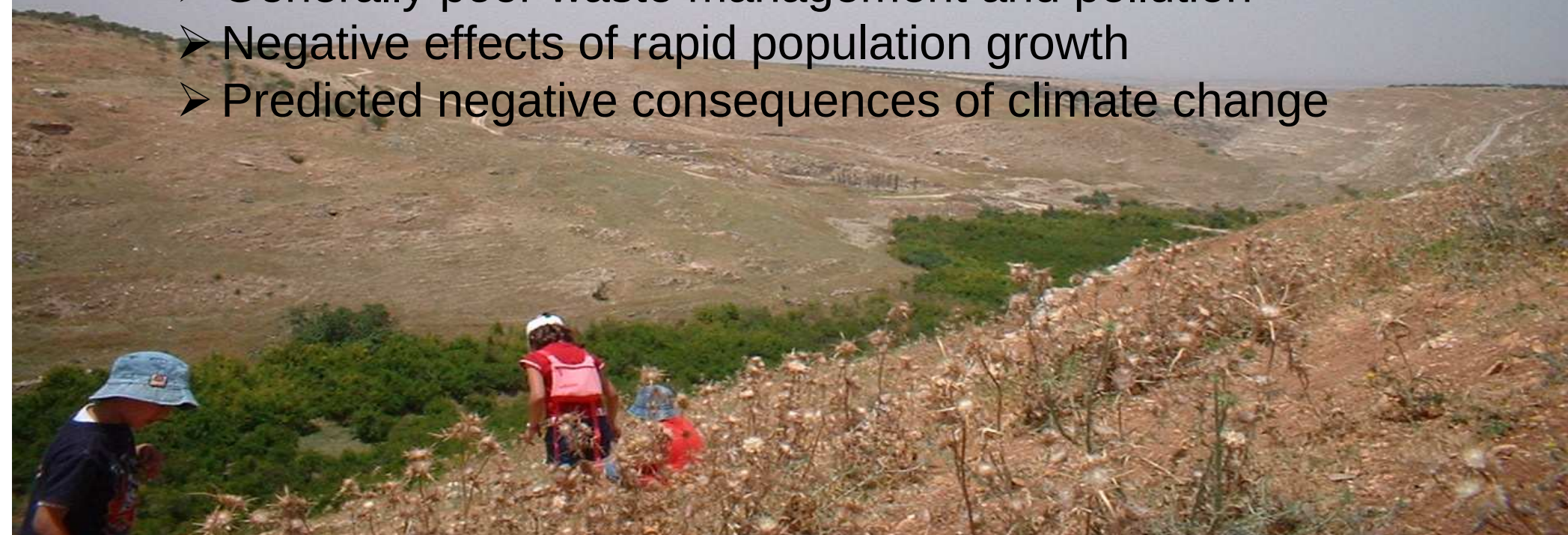
Environmental challenges

ESCWA: Opportunities for SMEs in EGS



Main environmental problems in the ESCWA region include

- Water scarcity, which gives much of region its desert character
- Increasing desertification
- Land degradation
- Generally poor waste management and pollution
- Negative effects of rapid population growth
- Predicted negative consequences of climate change



ESCWA: Opportunities for SMEs in EGS



SMEs offer potential to

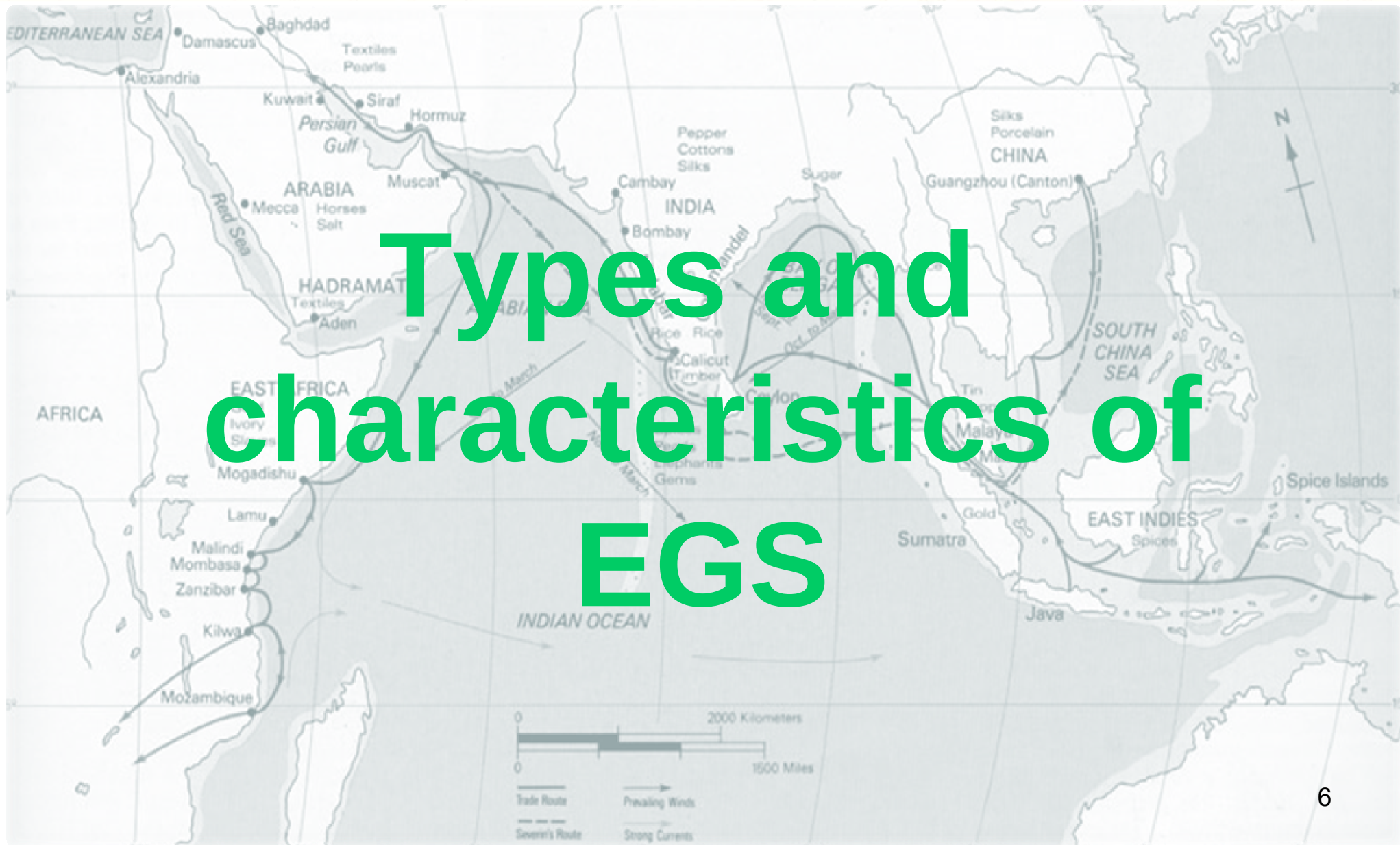
- **help deliver solutions to many environmental problems**
- **help to build a greener economy**
- **combat climate change**
- **create new jobs**



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Types and characteristics of EGS



Types of EGS



Trandtional

- Air pollution control
- Environmental consultancy & monitoring
- Marine pollution control
- Noise and vibration
- Contaminated land remediation
- Waste management
- Water supply and wastewater treatment
- Recovery and recycling

Renewables

- Solar power
- Wind generation
- Geothermal
- Biomass
- Tidal power

New/emerging

- Natural resource related EGS
- Green agricultural products
- Alternative fuels
- Carbon trading, storage & capture
- Green building technologies
- Green transport

In reality an indefinite number of goods/services could be classified as EGS, the sector is dynamic with products constantly evolving

ESCWA: Opportunities for SMEs in EGS



Suggested priority criteria for EGS development

1. Focus on those EGS which will have a positive effect on the main environmental problems and challenges of the region and which will help to work towards the MDGs
2. Potential for export to other countries outside the region
3. Areas where the region can take a lead



ESCWA: Opportunities for SMEs in EGS



Suggested priority EGS sectors for ESCWA countries

- Water management and waste-water treatment
- Solar and wind power
- Natural resource-based EGS
- Green building technology and green transport
- Waste management, recovery and recycling
- Green agricultural products



WATER



Opportunities

- . There are real opportunities for SME development and certain future demand
- Water use efficiency, leakage detection, metering, upgrading of pipes
- Water storage tanks & rainwater collection systems
- Water monitoring (quantity and quality)
- Water purification, filters
- Treated wastewater reuse & monitoring
- Agricultural sector, modern irrigation systems
- Devising effective policies & strategies
- Conservation

REGIONAL INNOVATIONS

- Agricultural innovations in minimising water wastage
- Full use of treated wastewater has been pioneered in Jordan and the Gulf and the region has a leading edge



Solar and wind power



Solar and wind power

Market driven by

- Rising oil prices,
- Consumer demand
- Legislation
- Carbon trading
- Realization that oil reserves are finite is also a factor
- Region has superb endowment of sunshine and wind – potentially limitless renewable energy.

Solar and wind power (2)

Multiple needs in terms of product:

- Goods - equipment and services are needed for generation, collection, storage and transmission and supply of appliances
- Services – feasibility, financing, installation, maintenance

OPPORTUNITY

SMEs can play an important role in the supply chain, especially when it comes to smaller units

At present however much alternative energy equipment is imported

Solar and wind power (3)

REGIONAL INNOVATIONS

- Egypt ranked in top 15 countries with commitment to renewable energy*
- Many innovations in UAE including Masdar City
- New Jordan renewable energy law
- Qatar Foundation activity
- Syria's *Masterplan for Energy Efficiency and Renewable Energies*
- IRENA in Abu Dhabi

*Ernst & Young *Renewable Energy Country Attractiveness Index* (May 2011)

Natural resource-based EGS



Forest technology and reforestation services

Forestry's contribution to natural resource and environmental management is significant

- Erosion regulation
- Pollination
- Seed dispersal
- Climate regulation
- Pest control
- Disease regulation
- Natural hazard protection
- Water purification & fresh water production
- Provision of habitats
- Nutrient cycling
- Soil formation and retention
- Production of atmospheric oxygen
- Water cycle
- Maintenance of genetic resources

Forest technology and reforestation services

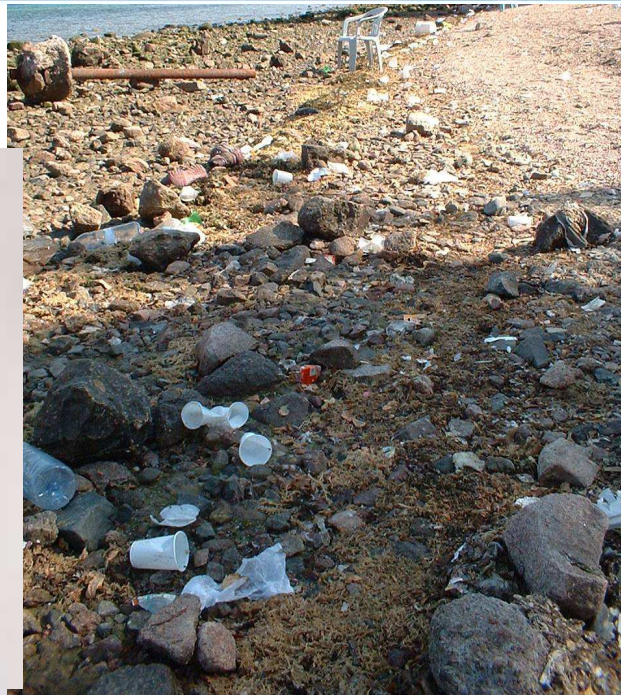
- SME OPPORTUNITIES
 - Food, fiber and fuel
 - Genetic resources
 - Bio-chemicals
 - Non-timber products
 - Education
 - Recreation & aesthetic pursuits
 - Ecotourism
 - Study of traditional cultures & beliefs

Ecotourism

EGS OPPORTUNITIES

- Accommodation developments (e.g. eco-lodges)
- Day attractions, particularly those which interpret the landscape
- Hiking trails
- Eco-friendly activities, nature study, horticultural tours
- Specialist activities such as scuba-diving and rock-climbing
- Catering businesses
- Craft production and sale
- Tour guiding and tour operations
- Educational projects such as cookery and language schools
- Facilities associated with national parks and reserves

Recovery & recycling



Waste management

All ESCWA countries have seen efforts made to address their solid waste management issues at the policy, legal, institutional operational and financial levels

The proportion of organic materials in the solid waste stream remains high, indicating opportunities for streamlining waste for recycling

To promote private sector development - clear regulatory and incentive contexts are needed

Waste management & recycling

OPPORTUNITIES

- Site management and cost recovery
- Specialist services, such as industrial or medical waste servicing
- Financing investment priorities for expanding waste management coverage in peri-urban and rural areas
- Establishing waste facilities that are affordable and technologically proven, rehabilitating old dumps and collecting and disposing of hazardous hospital waste
- Establishing recycling companies to engage responsibly

Waste management

SME OPPORTUNITIES

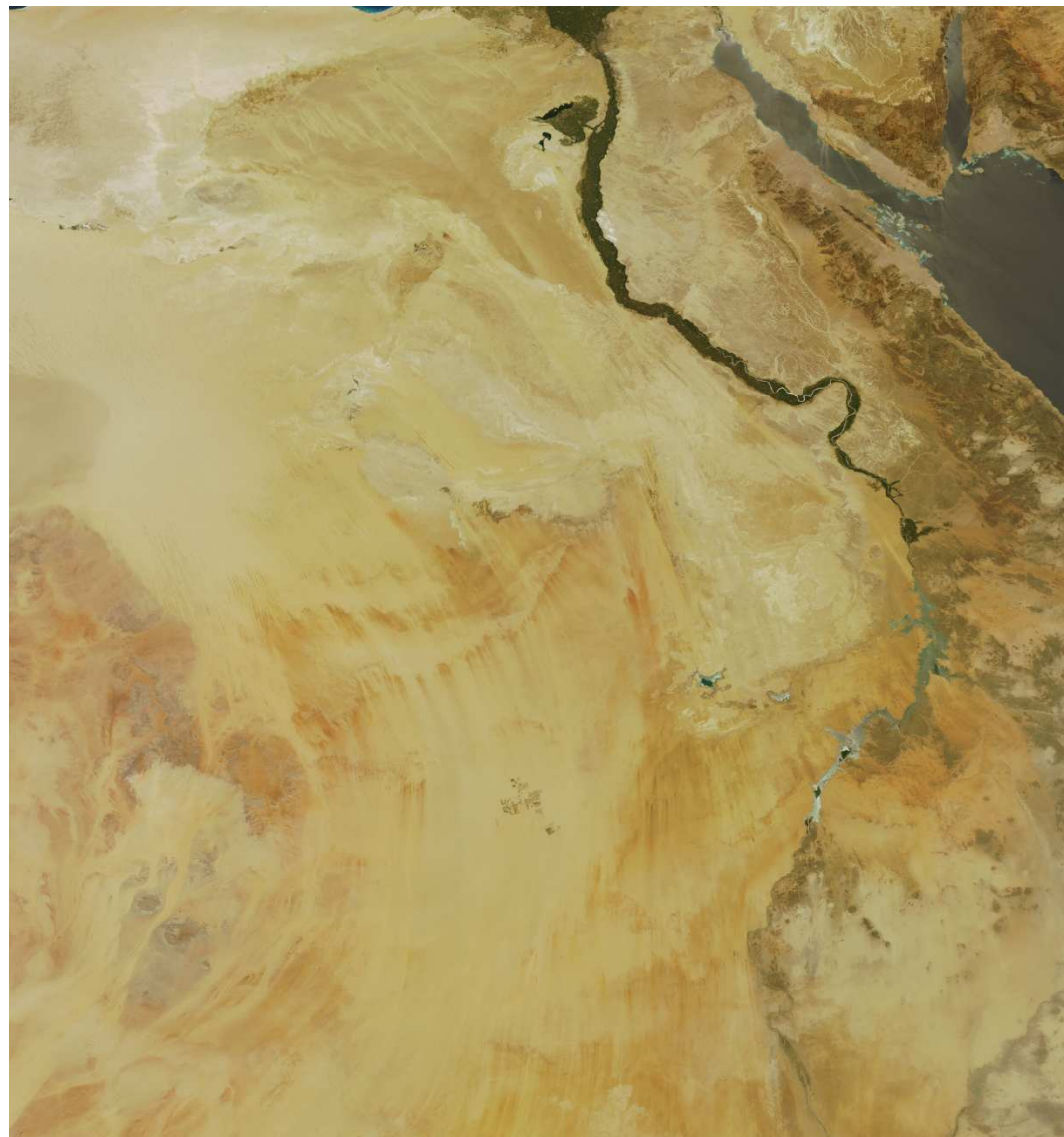
- Consultancy:
 - developing communications strategies and piloting community interaction
 - completing and updating municipal waste management plans
 - developing missing policies laws and regulations
 - designing a solid waste management information systems
- Training
 - enhancing the institutional framework based on clear responsibilities and accountability

Greening agriculture

In locations where water is available, sector has excellent potential for growth

favourable growing conditions, proximity to key global and strong regional demand.

The opportunity to 'green' this sector and make it more environmentally-friendly.



Greening agriculture

SME OPPORTUNITIES

- Water-saving systems
- Supply of agricultural inputs
- Training and consultancy - crop choice, appropriate technology or techniques,
- Crop monitoring systems
- Supply and operation & maintenance of machinery, irrigation technology, greenhouses, silos, boats, etc.
- Processing: dairies, canning, wineries, breweries, bakeries, meat processing, juice processing, tobacco processing, etc.
- Distribution: transport, storage, packaging & sorting (grading and handling), distribution.
- Marketing: design, intermediaries and campaign execution.

Organic Agriculture



Organic agriculture

Organic agriculture is becoming quite widely practiced in the ESCWA region, often with NGO support in remote rural areas

The benefits of organic agriculture include better soil retention which is important for combating desertification.

Organic agriculture

SME OPPORTUNITIES

- Supply of organic inputs: seeds, organic fertilizers, organic pest control systems, energy, etc.
- Organic certification
- Training and consultancy
- Distribution: transport, storage, packaging & sorting (grading and handling), distribution
- Marketing: design, intermediaries and campaign execution

CONCLUSIONS



ESCWA: Opportunities for SMEs in EGS



- Solar power and water conservation
- Waste management, recovery and recycling
- SMEs can immediately start to 'go green' in response to current trends and consumer demand
- A cluster-based approach
- SME development organizations and support centres need to highlight this opportunity to their members
- SMEs need to invest more in R&D, and work more closely with universities
- Urgent need to foster awareness and understanding of EGS and the green economy amongst the regions banks and investment funds

ESCWA: Opportunities for SMEs in EGS



- Governments have a key role to play
- Stricter environmental controls in areas like waste disposal, water quality, electricity generation and air quality will stimulate EGS demand
- Governments could develop Green Business Enterprise Parks and demonstration projects; assisting training and research in EGS
- Governments need to ensure that awareness-raising relating to EGS is provided at all levels
- Regulations need to be used to stimulate demand for EGS rather than to hamper enterprise.
- Better communication is needed between Governments and private sector



Thank you

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