

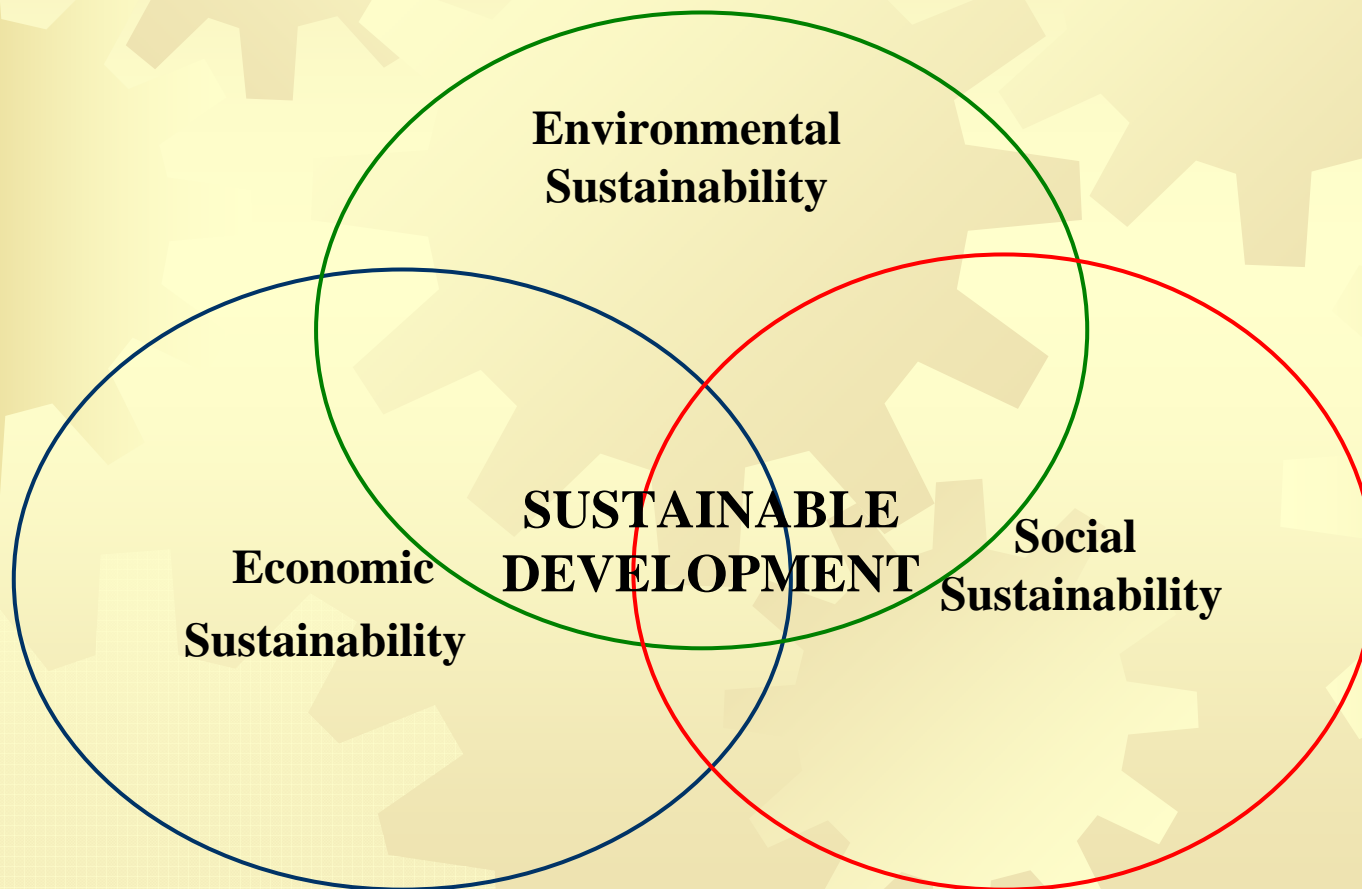


# Green Jobs for Climate Neutral Cities

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# The three pillars model



# Potential for green jobs

## ❖ Examples

- ❖ **Production and use of “green” building materials**
- ❖ **Efficiency in construction sites (e.g. reduction of waste)**
- ❖ **Energy efficiency in buildings, e.g.**
  - . Potential demand for LPG (Liquefied Petroleum Gas) or hot plates for households currently using open fire biomass
  - . Dwellings potentially requiring PV installations for direct lighting
  - . Retrofitting and solar installations for water pumping and heating, space heating
  - . Replacement of existing appliances with more efficient appliances, e.g., light bulbs
  - . Retrofitting for insulation
  - . Treatment of grey water, collection of rain water



# Examples of employment function of green refurbishment

- ❖ 20% savings of present energy consumption in the EU by 2020 can potentially create directly or indirectly up to one million new jobs in Europe
- ❖ Globally >100,000 workers are presently employed in the production of solar photovoltaic panels.
- ❖ In the production of solar thermal panels, more than 600,000 workers are employed in China, the USA and Europe



# Examples of projects and job creation

Project	Description	Country
1 Energy Efficiency-Housing Pilot Project	Upgrade, maintain and improvement of energy efficiency of crumbling apartment blocks inherited from the break-up Soviet Union	Lithuania
2 Low-income Housing Programme “My House, My Life”	1 million units with solar panels	Brazil
3 Ekurhuleni, Municipal buildings retrofit project	Installation of efficient lighting systems	South Africa
4 Johannesburg Housing Company	Use of energy-efficient light bulbs and day-night sensors, solar energy system for heating water, and insulation of boilers. (1,000 jobs)	South Africa
5 Watery, Soweto	Rehabilitation of plumbing fixtures (Over 1,500 temporal jobs)	South Africa
6 Energy retrofit of Khayelitsha housing	Installation of solar water heaters, compact fluorescent light bulbs or energy efficient lamps and insulated ceilings. (7 person-years during the construction phase. Could potentially create up to 508 person years.)	South Africa



## Examples of projects and job creation

Project	Description	Country
7Botswana Renewable Energy Project	Installation of solar powered heating systems and lighting appliances in 88 off-grid villages, installation of domestic cooking gas system.	Botswana
8Solar Energy Support Programme	Install PV systems, and improved lighting thus reducing kerosene and pinewood use (700 sales jobs, 700 people trained as technicians and 690 certified as qualified PV installers)	Nepal
9Azadjura Rural Housing Programme	Upgrade vernacular building systems using local materials	India



# Policy considerations1

- ❖ Information and awareness raising
- ❖ Skills training for labour force
- ❖ Managerial training for enterprises
- ❖ Information on profitability for investors



# Policy considerations2

- ❖ Institutional reform
  - ⊗ Legislative
  - ⊗ Financial framework



# Decent work

- ❖ Employment generation
- ❖ Social protection
- ❖ Workers rights
- ❖ Social dialogue





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