

ENERGY TODAY: PROSPECTS AND CHALLENGES

- **ENERGY AND MAJOR GLOBAL ISSUES** (Current energy patterns aggravate major issues; hence, alternative energy approaches are required to tackle these issues)
- **NEW TECHNOLOGICAL OPPORTUNITIES ON DEMAND & SUPPLY SIDES**



ENERGY TODAY: PROSPECTS AND CHALLENGES

- **BENEFITS OF SUSTAINABLE ENERGY**
- **ENERGY IS AN INSTRUMENT OF SUSTAINABLE DEVELOPMENT**
- **MAKING IT HAPPEN**



ENERGY AND SOCIAL ISSUES

- POVERTY
- GENDER DISPARITY
- POPULATION
- UNDERNUTRITION AND FOOD



ENERGY AND ENVIRONMENT

- HEALTH
- ACIDIFICATION
- CLIMATE CHANGE
- LAND DEGRADATION



ENERGY AND THE ECONOMY

- INVESTMENT
REQUIREMENTS
- FOREIGN EXCHANGE
IMPACTS



CRITERIA OF SUSTAINABLE DEVELOPMENT

- ECONOMIC EFFICIENCY
- EQUITY/ACCESS (PARTICULARLY
FOR THE POOR, WOMEN & RURAL
AREAS)
- EMPOWERMENT/SELF-RELIANCE
- ENVIRONMENTAL SOUNDNESS
- PEACE



GLOBAL TRENDS

- GLOBALIZATION
- MARKETIZATION
- DEMOCRATIZATION (POPULAR PARTICIPATION IN DECISION-MAKING)
- CORPORATIZATION OF UTILITIES
- CHANGING EXTERNAL FUNDING (MAGNITUDE AND SOURCES)



CONSTRAINTS

- DECLINING AVAILABILITY OF TRADITIONAL CAPITAL (INTERNALLY FROM GOVERNMENTS AND EXTERNALLY FROM ODA)
- CUT-BACKS IN GOVERNMENT SPENDING



GENERIC STRATEGIES

- UNIVERSAL ACCESS TO ENERGY SERVICES (OBLIGATION TO SERVE)
- INDIGENOUS CAPACITY BUILDING
- FOCUS ON ENERGY SERVICES (NOT MERELY ENERGY CONSUMPTION)
- MIX OF CLEAN FOSSIL-FUEL TECHNOLOGIES, RENEWABLES & END-USE EFFICIENCY IMPROVEMENTS



GENERIC STRATEGIES (CONTD)

- ESTABLISHMENT & MAINTENANCE OF A LEVEL PLAYING FIELD
- PROMOTION AND SAFEGUARDING OF COMPETITION
- ROLE FOR PRIVATE SECTOR
- ROLES FOR ALL STAKE-HOLDERS
- POLICY INSTRUMENTS THAT ARE NO/LOW COST TO TREASURIES



MARKET BARRIERS

- SUBSIDIES TO CONVENTIONAL ENERGY
- PRICES DO NOT REFLECT NEGATIVE ENVIRONMENTAL IMPACTS
- IMPERFECT INFORMATION
- FIRST-COST SENSITIVITY
- SPLIT INCENTIVES
- INDIFFERENCE TO ENERGY COSTS



NON-MARKET BARRIERS

- SUPPLY-BIASED PARADIGM
- INSTITUTIONAL OBSTACLES
- DECLINING R & D EXPENDITURES

