Joint UNIDO-UNEP Programme on Resource Efficiency and Cleaner Production (RECP)

Environmental Management Branch (UNIDO)

and

Sustainable Consumption and Production Branch (UNEP)
Background

- The International Programme of National Cleaner Production Centres launched in 1994 as a follow-up to the Rio Conference
  - 42 National Cleaner Production Centers and Programmes established worldwide
  - A number of technical tools and training manuals produced and thousands of national and industrial experts trained
  - Regional roundtables and networks of NCPCs established and promoted in Africa, Asia and Latin America
- The Joint UNIDO-UNEP Programme building upon the lessons and experiences from the NCPC programme
National Cleaner Production Centres

- Established to foster the uptake of CP concepts, methods, practices and policies in developing and transition economies
  - Five common service areas
    - Awareness building and information dissemination
    - Professional training
    - In plant assessments/technical assistance
    - Policy advice
    - Transfer of Environmentally Sound Technologies

- Start off as a project hosted by host institution, and transition over time into nationally owned entities
Resourcing

- NCPCs supported on country by country basis for a minimum of three years
- Contributions from host institutions, national government and some service income
- NCPCs participate in global network and contribute to multi-country projects, e.g. on energy efficiency, chemical leasing
- Range of donors, including Switzerland, Austria, Norway, Italy, Netherlands, Denmark, Sweden, Germany, EC
Why a Joint Programme?

- **Globalisation of Production and Consumption**
  - Goods and services are increasingly produced and consumed in developing and transition countries

- **National Needs**
  - 42 NCPC countries call for continued support to upscale and mainstream RECP while about an equal number of other countries have requested support

- **Organizational Synergies**
  - The programme capitalizes on complementary mandates and capacities of UNIDO and UNEP, further ‘Delivering as One UN’

- **Strategic Alignment**
  - RECP is an operational vehicle to deliver organization-wide strategic priorities on Green Industry and Green Economy
What is RECP?

- Resource Efficient and Cleaner Production (RECP) is the continuous application of an integrated preventive environmental strategy to processes, products and service to increase efficiency and reduce risks to humans and environment.

- It specifically works to advance:
  - *Production efficiency* through improved productive use of natural resources by enterprises.
  - *Environmental conservation* through minimization of the impact on nature by enterprises.
  - *Human development* through reduction of risks to people and communities from enterprises and supporting their development.
Problem Analysis

Limited implementation of RECP by businesses and other organisations

- Insufficient RECP service delivery capacity
- Limited awareness of and advocacy for RECP
- Limited policy and regulatory incentives for RECP
- Limited access to finance for EST/RECP investments
- Unsustainable Economic Growth
  - High pollution and waste intensities
  - Inefficient use of natural resources
- Continued Poverty
Joint UNIDO-UNEP Programme on RECP: Promoting progress towards sustainable industrial systems
Programme Outcomes

- Outcome 1: Service Delivery Capacity
- Outcome 2: Thematic Applications
- Outcome 3: Incentives (policy and finance)
- Outcome 4: Innovation (ESTs and products)
Joint UNIDO-UNEP Programme on RECP: Promoting progress towards sustainable industrial systems
Operational Architecture

- **Global programmatic activities**
  - Provide a programme level development facility for substantive projects that collectively benefit in principle all participating countries and cover all programme modules.
  - Coordination, networking, preparatory and review activities, knowledge management and efficient transfer of information, experience and technologies
    - ‘programme backbone’

- **Substantive projects**
  - Cover the implementation of the programme modules in the programme countries, through
    - **Country Projects**
      - Creating or strengthening of national RECP service delivery capacities, including through NCPCs/NCPPs
    - **Thematic Projects**
      - Focus primarily on development of innovative approaches, guidelines and/or toolkits on for example policy, finance or technology, and their parallel implementation in several countries
Joint UNIDO-UNEP Programme on RECP: Promoting progress towards sustainable industrial systems
Modular Design

Country projects

Armenia
Bolivia
Brazil
Bulgaria
Croatia
Colombia
Costa Rica
Croatia
Cuba
Czech Rep
Ecuador
Egypt
El Salvador
Ethiopia
FYR of Macedonia
Guatemala
Honduras
Hungary
India
Kenya
Lebanon
Mexico
Morocco
Mozambique
Nicaragua
PDR Lao
Peru
Rep of Korea
Romania
Russian Fed
Serbia
Slovakia
South Africa
Sri Lanka
Tunisia
Uganda
Ukraine
UR Tanzania
Uzbekistan
Viet Nam
Zimbabwe

Global

Joint UNIDO-UNEP Programme on RECP: Promoting progress towards sustainable industrial systems
**Modular Design**

Thematic projects

<table>
<thead>
<tr>
<th>1.1 Network</th>
<th>1.2 New NCPC</th>
<th>1.3 Upgrading NCPC</th>
<th>2.1 Res. Efficiency</th>
<th>2.2 Waste Prev.</th>
<th>3.1 Safe Production</th>
<th>3.1 Policy</th>
<th>3.2 Ext. Finance</th>
<th>4.1 STIs</th>
<th>4.2 OGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bolivia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Croatia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cuba</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Rep.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>El Salvador</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FYR of Macedonia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guatemala</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lebanon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morocco</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nicaragua</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDR Lao</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peru</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rep of Korea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russian Fed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serbia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovakie</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sri Lanka</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tunisia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UR Tanzania</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uzbekistan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zimbabwe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Joint UNIDO-UNEP Programme on RECP: *Promoting progress towards sustainable industrial systems*
Joint UNIDO-UNEP Programme on RECP: Promoting progress towards sustainable industrial systems

Governance

Programme Board

Programme Management

Network Committee

UNIDO CP Unit

UNEP SCP Unit

Regional and National Coordination and Implementation (through UNEP Regional Industry Officers and UNIDO Country & Regional Offices)

Network Members
(regional, national and sub-national C(RE)P Centres and Networks)

Programme Activities
Service delivery to network members (networking, capacity building, etc)

Projects
Implemented by network members with specific national, thematic or sector focus, governed by complementary project management arrangements
### Roles and Responsibilities

<table>
<thead>
<tr>
<th>Modules</th>
<th>Components</th>
<th>Leading Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Building RECP Service Delivery Network</td>
<td>1.1 Active and expanding professional global network of RECP Service Providers</td>
<td>UNEP and UNIDO</td>
</tr>
<tr>
<td></td>
<td>1.2 Establishment of RECP service delivery capacity in countries new to the Programme</td>
<td>UNIDO</td>
</tr>
<tr>
<td></td>
<td>1.3 Supporting of existing NCPCs/NCPPs for up-scaling of activities and further institutional and professional development</td>
<td>UNIDO and UNEP</td>
</tr>
<tr>
<td>2. Thematic RECP Applications</td>
<td>2.1 Delivery of thematic projects on Resource Efficiency</td>
<td>UNEP and UNIDO</td>
</tr>
<tr>
<td></td>
<td>2.2 Delivery of thematic projects on Waste and Emission Prevention</td>
<td>UNIDO</td>
</tr>
<tr>
<td></td>
<td>2.3 Delivery of thematic projects on Safer and Responsible Production</td>
<td>UNEP</td>
</tr>
<tr>
<td>3 Policy and finance mechanisms for RECP</td>
<td>3.1 Promote a flexible framework for mainstreaming RECP in government policy</td>
<td>UNEP</td>
</tr>
<tr>
<td></td>
<td>3.2 Develop financing mechanisms for RECP investment in industries</td>
<td>UNIDO</td>
</tr>
<tr>
<td>4. Technology management and product development</td>
<td>4.1 Develop technology management capacity for EST transfer, adaptation and replication</td>
<td>UNIDO</td>
</tr>
<tr>
<td></td>
<td>4.2 Assist countries on development and marketing of sustainable products</td>
<td>UNEP</td>
</tr>
</tbody>
</table>
Indicative Budget

- Total budget (5 yrs): ~ 70 M€
  - Three levels of resource mobilization and implementation
    - ~16% Programmatic backbone activities
    - ~19% Substantive thematic projects
    - ~65% Country implementation projects
  - Breakdown of backbone funding (~11M€)
    - UNEP: 4.7 Million Euro (~42%)
    - UNIDO: 6.5 Million Euro (~58%)
  - Target contributions
    - ~75% donors
    - ~25% national contributions (incl. cost recovery)
      Plus UNIDO and UNEP in kind (~4 M€)
Key deliverables

- One global and three regional networks of RECP service providers established/strengthened
- Technical capacities of 42 existing National Cleaner Production Centers (NCPCs) enhanced in the area of RECP
- RECP activities launched in 15 additional countries with the purpose of building national capacity for RECP service provision
- A minimum of five toolkits and training manuals prepared covering the key areas of RECP including: energy efficiency, water efficiency, materials and chemicals management, safer production and waste management.
- More than 500 experts trained as trainers through regional TOTs
- A minimum of 5,000 industries assisted to achieve measurable economic, environmental and social benefits from RECP implementation
- A minimum of 15 countries supported to mainstream RECP in national policy and planning processes and/or for creating a financial instrument for RECP
- A minimum of 10 countries supported to develop and implement a national programme on the development and marketing of sustainable products
- A global knowledge management system supported by regional and national nods established to facilitate knowledge exchange and the transfer of environmental sound technologies.
Current Status

- Detailed programme strategy document and detailed project document for the core programme activities finalized
- The strategic framework already being used for:
  - Joint programming in new programme countries (Albania, UAE, Mauritius, etc.)
  - Preparation of extension for existing NCPCs (Lao PDR, Cambodia)
  - Scoping of new thematic activities (tourism, chemicals, D4S, RECP finance, etc.)
- A joint resource mobilization strategy developed