UNIDO-UNEP Resource Efficient and Cleaner Production (RECP) Programme

Environmental Management Branch
United Nations Industrial Development Organization (UNIDO)

and

Sustainable Consumption and Production Branch
United Nations Environment Programme (UNEP)
Genesis

- UNIDO and UNEP collaborate to establish and support National Cleaner Production Centres (NCPCs) which foster adaptation and adoption of Resource Efficient and Cleaner Production (RECP)
  - Programme launched in 1994 and expanded to 47 countries in 2010
  - Clearly demonstrated triple benefits of RECP
    - Environmental, social and economic
  - Experience needs to be scaled-up and mainstreamed to contribute to achievement of decoupling goals
Evolving Context

Sustainable Development

Green Economy

Green Industry

Sustainable Consumption & Production

Cleaner Production

Vision (aim)

Policy

Operational practices

Economy Level

Sector-Level

Micro-Level
Resource Efficient and Cleaner Production (RECP)

- Continuous application of preventive environmental strategies to processes, products and services to increase efficiency and reduce risks to humans and the environment.
Programme Objective

To improve resource productivity and environmental performance of businesses and other organizations and thereby contribute to sustainable industrial development and sustainable production and consumption

Overarching Outcome

RECP concepts, methods, practices and policies widely implemented by businesses, governments, business services’ and finance providers and other stakeholders in particular in the participating countries

Contributing Outcome 1: RECP Services Delivery Network

RECP service delivery capacity enhanced, through NCPCs/NCPPs and other RECP service delivery mechanisms

Contributing Outcome 2: Thematic RECP Applications

RECP implemented by enterprises and environment, resource use and economic benefits accomplished by enterprises have been verified

Contributing Outcome 3: RECP Incentives

RECP mainstreamed in relevant policy, regulations and enterprise finance

Contributing Outcome 4: Innovation Capacity

National capacities strengthened for implementation of Environmentally Sound Technologies and sustainable product developments

Decouple

Scale-Up

Unido

UNIDO-UNEP RECP Programme

Green Industry – Green Economy
Programme Modules

1. RECP Service Delivery Network
   - 1.1 Global RECP Network
   - 1.2 New NCPCs
   - 1.3 Existing NCPCs

2. Thematic RECP Applications
   - 2.1 RECP for Resource Efficiency
   - 2.2 RECP for Waste & Emission Prevention
   - 2.3 RECP for Safe & Responsible Production

3. RECP Incentives
   - 3.1 Policy for RECP
   - 3.2 Finance for RECP

4. RECP Innovation
   - 4.1 Environmentally Sound Technologies
   - 4.2 Sustainable Product Developments
Programme Modules: 2009-2011

1. RECP Service Delivery Network
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   4.1 Environmentally Sound Technologies
   4.2 Sustainable Product Developments

Programme Modules:
- UNIDO-UNEP RECP Programme
- Green Industry – Green Economy
Programme Modules: expected programmatic support 2012-onward

1. RECP Service Delivery Network
   1.1 KMS & Manuals (SECO)
   1.2 New NCPCs
   1.3 Existing NCPCs

2. Thematic RECP Applications
   2.1 RECP for Resource Efficiency
   2.2. RECP for Waste & Emission Prevention
   2.3 RECP for Safe & Responsible Production

3. RECP Incentives
   3.1 RECP Policy (EU)
   3.2 Finance for RECP
   3.2 RECP finance (SECO)

4. RECP Innovation
   4.1 Environmentally Sound Technologies
   4.2 Sustainable Product Developments
   4.1 SPIN (EU)

1.1 Training
1.3 Upscaling EIPs/tourism (SECO)

1.1 KMS & Manuals (SECO)
1.3 Existing NCPCs

2.1 RECP for Resource Efficiency
2.2. RECP for Waste & Emission Prevention
2.3 RECP for Safe & Responsible Production

3.1 Policy for RECP
3.2 Finance for RECP
3.2 RECP finance (SECO)

2.2 Industrial Waste Minimization (biowaste)
2.3 chemicals management

4.1 SPIN (EU)
4.2 Sustainable Product Developments
RECP net

- Not-for-profit initiative to bundle and utilize existing capacities of NCPCs and RECP service providers
  - Charter and supportive by-laws on membership and code of conduct developed and agreed upon

- Objectives
  - Enable and contribute to effective RECP promotion and implementation
  - Foster North-South and South-South collaboration and transfer of methods, policies and technologies

- Functions
  - Innovation and knowledge management
    - Operational in Latin America (CPlatinet) and being established for Arab region
  - Capacity building
    - Primer on Organization, Management and Governance
    - Primer on Enterprise Level Indicators
  - Advocacy
  - Quality control and branding
    - Became operational on 3rd November with initial membership of 41 organizations
Analyzing the Challenges

1. Limited awareness of RECP Benefits
2. Limited understanding of RECP methods and practices

Limited implementation of CP methods, practices and technologies by businesses and other organisations

Operational cost savings are low due to low resource prices
Environmental compliance (and cost of non-compliance) are low
Market does not routinely reward environmental performance
Information, services and technology for CP insufficiently accessible
Applicability of service and technologies in CP insufficient for target enterprises
Affordability of services and technologies for CP low, due to their high cost relative to benefits attainable by enterprises

Weak incentives
High transaction costs

Unsustainable economic development
High pollution and waste intensities
Inefficient use of natural resources
Continued poverty and environmental degradation

Root causes
Present status
Un-desired impacts

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Root causes
Present status
Un-desired impacts
<table>
<thead>
<tr>
<th>Terminology</th>
<th>Description</th>
<th>Principle</th>
<th>Application Areas</th>
<th>Thrust</th>
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<tbody>
<tr>
<td>1. Expanding</td>
<td>Seeking new applications and markets for practices proven elsewhere</td>
<td>Learning and adapting</td>
<td>New sectors, countries, clusters, etc</td>
<td>Making it applicable in different areas</td>
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<tr>
<td>2. Mainstreaming</td>
<td>Making it common place, integrated and accepted in daily practice (as compared to specialized side-activity)</td>
<td>Embedding</td>
<td>Procedures, rules, systems and/or institutions of government and businesses</td>
<td>Doing it routinely</td>
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<td>3. Scaling-Up</td>
<td>Achieving a comparable output with a significantly lower input</td>
<td>Efficiency gains: <em>walk the RECP talk</em></td>
<td>Methods, tools, solutions, policies</td>
<td>Making it easier</td>
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<td>4. Replicating</td>
<td>Large scale application of known solutions and best practices (‘widening’)</td>
<td>Applying</td>
<td>Within the same target group, sector or cluster</td>
<td>Using best practices – business development</td>
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<tr>
<td>5. Innovating</td>
<td>Finding new solutions that have more substantive benefits (‘deepening’)</td>
<td>Research and development</td>
<td>All areas</td>
<td>Continuous development and improvement</td>
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Framework

- Innovate
- Streamline
- Expand
- Replicate

Scaling-Up

More companies
More impact per company
Less effort per company

Public Policy → Public Institutions → Markets → Society

Mainstreaming
Thematic Applications

Resource Efficient and Cleaner Production: innovation for low carbon industry

DEMATATERIALIZING PRODUCTS
developing new products that require less materials and energy over their lifecycle

INCREASING PROCESS EFFICIENCY
reducing the intensity of use of energy, materials, chemicals and water

MINIMIZING PROCESS EMISSIONS
adopting clean technologies to minimize the generation of non-energy greenhouse gases

SWITCHING TO LOW-CARBON INPUTS
using renewable and other low-carbon sources of energy and materials

CLOSING THE CARBON LOOP
recovering organic wastes for reuse as feedstock for energy and materials
Regional Thematic Initiatives

- **Africa (Dec 2009)**
  - Waste minimization
  - Chemicals management

- **Eastern Europe and Central Asia (Oct 2010)**
  - Low carbon industry
  - Tourism

- **Latin America (Oct 2010)**
  - Low carbon industry
  - Tourism

- **Asia and Pacific (Jan 2011)**
  - Water productivity
  - Industrial parks
Status

- RECP Programme consolidated and entered implementation stage
  - Programmatic funding not yet confirmed causing delays
  - Emerging agendas present mid term opportunities but require upfront investment of management resources
    - Green Industry/Economy/Growth
    - Climate innovation
  - Co-responsibility for programme development and implementation with RECP net and its members is emerging
Thank You

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