Summit on Science and Technology Enablement for the Sustainable Development Goals



Session C: Sustainable Consumption and Production (SCP)

- Location: Board Room
- Co-Leads:
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 - Center
- Facilitator:

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Sustainable Consumption and Production Scope and Opportunity

Definition:

The production and use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of future generations.

Key points:

- Narrowing the loop on value chains to a sustainable point
- Includes environmental and social factors
- Ecological efficacy
- Includes both consumption (behavior change, incentives, regulators) and production (efficiencies, materials, externalities)



Sustainable Consumption and Production Research and Data

Key Gaps for Production:

- Interdisciplinary science collaboration arts-business-science
 - System-based solutions/method for closed loop solutions
 - Data needs: LCA, remote sensing, agricultural production
 Dematerialization/decarbonization
- Scalability
- Waste/materials use
- Internalization of externalities and costs
- Traceability through value chains/ biodiversity
- Food/water/energy nexus



Sustainable Consumption and Production Research and Data

Key Gaps for Consumption:

- Drivers for adoption
- Drivers for retirement of technologies
- Scalability
- Data/transparency/true costs/awareness
- Translate data to consumers
- Access to alternatives
- Incentives/social science
- Law/policy/regulation and behavior change
- Use and education
- Create mindset shifts



Key Points for Production:

- Scaling up
 - Across industries
 - Not necessarily big scale first; can be small scale/networks
- Interdisciplinary collaboration
 - Enables broader access to funding/solutions/data
- Data
 - Barriers: collection, interpretation, IP. Solutions: define precompetitive
 - Opportunities: leverage and access large data sets from likes of Google/IBM; Establish clear definitions + validation



Key Points for Production:

- Systems-based
 - Invest in funding around systems
 - Action/advocacy
 - Look for best practices in countries
 - Training along lines of system
 - Set agenda to enhance systems thinking
 - Set funding expectations to ensure interdisciplinary/systems approach
 - Create LCA/ PLM tool to ensure thought and right resources
 - Include social sustainability



Key Points for Production:

- Examples of targets by sector
- Examine and set targets by sector look for specific sustainability impacts, cross industry collaboration



Key Points for Consumption:

- Consumer-facing nutrition and product labels
 - Regulation, create frameworks and languages
- Influence consumers away from consumption/materialization
 - Advocacy, messaging
- Education
- Agreed upon frameworks
 - Improve data quality LCA drawing boundaries, having consistent data to make decisions
 - Revisit establishing int'l oversight body and line of sight to resourcing



Sustainable Consumption and Production Roadmap: Key Success Metrics

Key Points:

- If success considers both social and environmental factors included
- Sector or system-specific targets



Sustainable Consumption and Production Roadmap: Proofs of Concept

Key Points:

• Drip irrigation in India (Example of scaling)

