

<b>Course title:</b> Sustainable Consumption and Production				
<b>Course code:</b> PPS 127	<b>No. of credits:</b> 2	<b>L-T-P:</b> 26-4-0	<b>Learning hours:</b> 30	
<b>Pre-requisite course code and title (if any):</b> None				
<b>Department:</b> Policy and Management Studies				
<b>Course coordinator:</b> Prof Shaleen Singhal		<b>Course instructors:</b> Prof Shaleen Singhal		
<b>Contact details:</b> <a href="mailto:shaleen.singhal@terisas.ac.in">shaleen.singhal@terisas.ac.in</a>				
<b>Course type:</b> Core (MAPP&SD) and elective (other PG programmes)			<b>Course offered in:</b> Semester 1	
<p><b>Course description:</b>  Countries in South Asian region are witnessing rapid transformation. It is evident that future prosperity and transition to sustainability in this region will be highly influenced by changes in development of the countries and businesses as well as in consumption patterns and lifestyles. There are noticeable awareness generation and capacity building initiatives aiming to promote a shift towards sustainable consumption and production (SCP) patterns and resource efficiency for green growth and poverty reduction in South Asian region. The enabling policy environment needs to be strengthened through enhanced capacity of future decision makers in order to ensure balance between demand and supply side towards SCP. Advanced knowledge, skills and commitment of policy makers and graduates today are critical constituents necessary to structure and successfully implement sustainable development policies in future. India in particular, with its young population is likely to rise from twelfth-largest consumer market today, to become world's fifth-largest consumer market by 2025. While the significance of SCP and resource efficiency is well accepted in India, imparting knowledge to policy and decision makers shall facilitate an enabling environment for comprehensive integration of SCP into policy making. This is being aimed through the first-of-its-kind post graduate course in India for young policy and decision makers.</p>				
<p><b>Course objectives:</b></p> <ul style="list-style-type: none"> <li>▪ To impart knowledge on SCP concepts, significance and advancements within India and wider South Asia region in order to create a pool of better informed future policy makers.</li> <li>▪ To equip young policy makers with knowledge on demand side and supply side challenges and opportunities relating to SCP</li> <li>▪ To equip young policy makers for policy analysis of select sectors targeting to mainstream SCP into policy.</li> </ul>				
<b>Course Contents</b>				
Module	Topic	L	T	P
1	<p><b>Introduction to Sustainable Consumption and Production (SCP)</b>  This module on 'Introduction to SCP' provides the significance of SCP in the context of Sustainable Development linking the Sustainable Development Goal 12 (Responsible Consumption and Production) giving an overview of the subject.</p> <p><b>Subtopic 1 – Significance &amp; Theoretical Context</b></p> <ul style="list-style-type: none"> <li>• SCP and its significance for Sustainable Development</li> <li>• Linking SCP with Sustainable Development Goals (SDGs)</li> <li>• Review of SCP Targets under SDG and crosscutting targets and indicators</li> <li>• Internalizing SCP elements in development goals of poverty reduction, resource efficiency, sustainable livelihoods, climate change mitigation/adaptation</li> </ul> <p><b>Subtopic 2 – Contemporary Thinking</b></p>	6		

	<ul style="list-style-type: none"> <li>• Reviewing SCP and SDG’s transformative indicators. Gap analysis relating to achieving SDGs (policy, practice, financing, technology gaps)</li> <li>• International approaches: Global SCP Policies and Practices (examples from countries which have adopted SCP goals).</li> <li>• Innovative ideas for SCP that can integrate with existing policy features.</li> </ul>			
2	<p><b>SCP in Regional, National and Local Policy Frameworks</b> This module on ‘SCP in Regional, National and Local Policy Frameworks’ provides a comparative account of the policy frameworks in different countries and India with a focus on the South Asian Region for SCP integration.</p> <ul style="list-style-type: none"> <li>• Challenges and opportunities for SCP in emerging economies</li> <li>• Regional focus on European Union, ASEAN and South-Asian sub-regional integration of SCP into public governance frameworks</li> <li>• National focus on India</li> <li>• State level focus and progress across Indian states on SCP topics.</li> </ul>	2		
3	<p><b>Demand-side: Sustainable Behaviours and Lifestyles</b> This module on ‘Sustainable Behaviours and Lifestyles’ essentially gives an insight into the changing lifestyles and the consumer behaviour for promoting behavioural changes.</p> <p><b>Subtopic 1 – Consumer choices and behaviours:</b></p> <ul style="list-style-type: none"> <li>• How do consumers determine eco-friendliness of products? Behavioural vs. regulatory obstacles to sustainable consumption choices, consumption ‘hot spots’ and its effectiveness, advertisement control, etc.</li> </ul> <p><b>Subtopic 2 – Mechanisms for promoting behavioral changes:</b></p> <ul style="list-style-type: none"> <li>• Promotional activities to attract consumers</li> <li>• Sustainable Public Procurement ‘Green procurement’ in government and private sector targeted through awareness and education campaigns on sustainability for consumers.</li> <li>• Production optimization based on prevailing consumption patterns.</li> </ul>	4		
4	<p><b>Mainstreaming SCP I – SCP for Resource Efficiency and Cleaner Production</b> This module on ‘Mainstreaming of SCP I – SCP for Resource Efficiency and Cleaner Production’ is intended to provide the concept of optimal use of resource to prevent waste generation in industrial processes.</p> <ul style="list-style-type: none"> <li>• Designing for sustainability: Process, product and systems innovation – improved production processes, eco-friendly products, innovative low-impact technologies, supply chain management</li> <li>• Zero waste / Circular economy across interlinked sectors</li> <li>• Adoption of cleaner production processes (efficiency in production, resources management including energy, water and materials)</li> <li>• Cleaner Production Process in SME Sectors</li> </ul>	6		

	<ul style="list-style-type: none"> <li>Life Cycle Thinking and Systems Approach</li> <li>Customize policy discussion for India's economic/environmental scenario with specific reference to consumption, production and links with economic growth</li> </ul>			
6	<p><b>Mainstreaming SCP II - Development and Implementation of Policies</b>  This module on 'Mainstreaming SCP II – Development and Implementation of Policies' is a study on the existing practices that promote developmental activities and for integrating SCP in the existing policies with monitoring and evaluation mechanism.</p> <ul style="list-style-type: none"> <li>Existing SCP elements/practices in development goals Regional, national and sectoral specificities</li> <li>Identifying the target policies and instruments for implementing SCP Current policy provisions: <ul style="list-style-type: none"> <li>➤ Enhancement for effectiveness</li> <li>➤ Cross ministry interface</li> <li>➤ Need for alternatives</li> </ul> </li> <li>Planning and implementation: SCP integration into existing policy structures. Exploring stakeholder engagement in policy-making</li> <li>Monitoring and Evaluation: Assessment of sustainable production (upstream) and sustainable consumption (downstream) activities and policies.</li> <li>Ensuring implementation of SCP practices in production and consumption activities, adherence to directives as well as effectiveness and efficacy of said practices.</li> </ul>	6		
6	<p><b>Mainstreaming SCP III - Economic and Fiscal instruments</b>  This module on 'Mainstreaming SCP III – Economic and Fiscal Instruments' provides the insight into the financial models for SCP and their possible applications.</p> <ul style="list-style-type: none"> <li><b>Financial models for SCP:</b> <ul style="list-style-type: none"> <li>➤ Government based taxes and subsidies and user fees</li> <li>➤ Green public procurement</li> <li>➤ Using polluter pays principle – such as air, water pollution tax, carbon tax etc.</li> <li>➤ Green investment loan</li> <li>➤ Conditional cash transfer programmes</li> </ul> </li> <li><b>SCP in MSMEs:</b> <ul style="list-style-type: none"> <li>➤ Internalizing SCP in business strategies and supply chains</li> <li>➤ Investment allowance for energy-efficient/green technologies</li> <li>➤ Environmental Fiscal Reforms (EFR)</li> <li>➤ Reduction of environmentally harmful subsidies (like reduce fuel subsidies)</li> </ul> </li> </ul>	2		
7	<b>Presentations on policy analysis related appraisals</b>		4	
	<b>Total</b>	<b>26</b>	<b>4</b>	<b>0</b>

**Evaluation criteria:**

Course assessment will be conducted through:

**Test I: 35%**

Oral presentation on literature review (and structure of report) for critical analysis of an existing policy in thematic areas such as - sustainable public procurement; resource efficiency and cleaner production; behavioral aspects of consumer choices; production optimization based on prevailing consumption pattern; green budgeting and macroeconomics; sustainable energy access, policy and management; strategic planning and investment for resource efficient cities; sustainable tourism and environmental services; and any other sectoral policies. These shall be examined for India with related case examples of other countries. [Modules 1 to 3]

**Test II: Policy Analysis Report Final 65% [Module 4 to 6]**

Policy analysis report for an identified policy/sector. Detailed critical analysis of gaps in existing policy, challenges in implementation, governance etc. and appropriate changes proposed to mainstream sustainability and SCP principles into the policy. Written report.

**Learning outcomes:**

On successful completion of this course, the students shall:

- Be able to understanding significance of sustainable consumption and production for sustainable development and its implications in achieving SDGs
- Be able to provide effective applications of SCP elements in business to enable resource efficiency in production and economies in scale.
- Be able to examine the potential synergy between SCP plans and policies.
- Have learned the significance of various policy instruments, strategy options and institutional arrangements to mainstream SCP for effective sustainable development governance.

**Pedagogical approach:** The course will be delivered through a mix of classroom lectures, brainstorming tutorial and presentation sessions, study visits and exposure to national, regional and global case studies on the theme.

**Materials:****Required readings:**

1. Sustainable Consumption and Production in the Proposed Sustainable Development Goals – A paper from the Inter-Agency Coordination Group (IACG) of the 10 Year Framework of Programmes on SCP (10YFP). June, 2014. Available at: [www.unep.org/10yfp/Portals/50150/10YFP%20IACG.pdf](http://www.unep.org/10yfp/Portals/50150/10YFP%20IACG.pdf).
2. Decoupling 2: technologies, opportunities and policy options. A Report of the Working Group on Decoupling to the International Resource Panel. von Weizsäcker, E.U., de Lardereel, J., Hargroves, K., Hudson, C., Smith, M., Rodrigues, M.
3. Access to Finance for Sustainable Consumption and Production in Asia – An Overview of Finance Trends and Barriers in India. Available at: [http://www.switch-asia.eu/fileadmin/user\\_upload/Publications/2016/Green\\_Finance\\_Study\\_-\\_2016\\_-\\_India.pdf](http://www.switch-asia.eu/fileadmin/user_upload/Publications/2016/Green_Finance_Study_-_2016_-_India.pdf)
4. The Energy and Resources Institute (TERI) Policy Brief (2013). Engagement with Sustainability Concerns in Public Procurement in India: Why and How. Available at: <http://www.teriin.org/policybrief/index.php?a=9>

## Suggested readings

1. Akenji, L. and Bengtsson, M., 2014. Making Sustainable Consumption and Production the Core of the Sustainable Development Goals, Sustainability, 6 (2014): 513-529. Available at: <http://www.mdpi.com/2071-1050/6/2/513>
2. Chiu, S.F., Ward, J. V., and Massard, G., 2009. Introduction to the special issue on Advances in Life-Cycle Approaches to Business and Resource Management in the Asia-Pacific Region, Journal of Cleaner Production, 17(14): 1237-1240. Available at: <http://www.sciencedirect.com/science/article/pii/S0959652609001383>
3. Rebitzer, G., Ekvall, T., Frischknecht, R., Hunkeler, D., Norris, G., Rydberg, T., Schmidt, W. –P., Suh, S., Weidema, B.P., and Pennington D.W., 2004. Life cycle assessment: Part 1: Framework, goal and scope definition, inventory analysis, and applications, Environment International, 30 (5): 701-720. Available at: <http://www.sciencedirect.com/science/article/pii/S0160412003002459>
4. Zhao, W. and Schroeder, P., 2010. Sustainable consumption and production: Trends, challenges and options for the Asia-Pacific region, Natural Resources Forum, 34(1): 4-15. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1477-8947.2010.01275.x/pdf>
5. Low-Carbon Green Growth in Asia Policies and Practices: A Joint Study of the Asian Development Bank and the Asian Development Bank Institute. 2013. Available at: <http://www.adb.org/publications/low-carbon-green-growth-asia-policies-and-practices>
6. Tseng, S. and Hung, S., 2013. A framework identifying the gaps between customers' expectations and their perceptions in green products, Journal of Cleaner Production, 59: 174-184. Available at: <http://www.sciencedirect.com/science/article/pii/S0959652613004411>
7. Green Public Procurement in Bhutan (GPP Bhutan), 2015. Executive Summaries of Year 1 Activity Reports. Available at: <http://gppbhutan.bt/project-publications>
8. Rathi, A.K.A., 2003. Promotion of cleaner production for industrial pollution abatement in Gujarat (India), Journal of Cleaner Production, 11(5): 583-590. Available at: <http://www.sciencedirect.com/science/article/pii/S095965260200094>
9. Wuppertal Institute for Climate, Environment and Energy, 2013. Lighting: Energy Efficient Lighting for Sustainable Development.
10. FICCI/UNEP, 2015. Designing a Sustainable Financial System for India: Interim Report. Available at: <http://ficci.in/spdocument/20546/UNEP-Interim-Report.pdf>
11. J.M., and Nathadwarawala, K.M., 2011. Sustainable Business Initiatives in the Context of Emerging Economies, In B. Unhelkar (Ed.), Handbook of Research on Green ICT: Technology, Business and Social Perspectives: 265-281. Available at: <http://www.igi-global.com/chapter/sustainable-business-initiatives-context-emerging/48433>

## Case Studies

## Websites

1. Intended Nationally Determined Contributions to UNFCCC; Online at: [http://unfccc.int/focus/indc\\_portal/items/8766.php](http://unfccc.int/focus/indc_portal/items/8766.php)

2. SCP Clearinghouse  
The Global SCP Clearinghouse is a unique one-stop hub dedicated to Sustainable Consumption and Production (SCP) and convened by the United Nations Environment Programme (UNEP) acting as the Secretariat of the 10 Year Framework of Programmes on SCP (10YFP on SCP); Online at: <http://www.scpclearinghouse.org/>
3. SCP Policies and the 10 Year Framework Programme, UNEP; Online at: <http://www.unep.org/resourceefficiency/Policy/SCPPolicies/tabid/55539/Default.aspx>
4. SWITCH-Asia projects funded by the European Union; Available at: <http://www.switch-asia.eu/projects/>
5. UNDP projects on environmental aspects related to SCP in India; Available at: <http://www.in.undp.org/content/dam/india/docs/UNDP%20Fact%20Sheet%20-%20MEFCC.pdf>
6. UNEP's Resource Efficiency Programme; Online at: <http://www.unep.org/resourceefficiency/Home/Society/tabid/55529/Default.aspx>
7. UNIDO projects on cleaner production topics; Available at: <http://www.unido.org/en/where-we-work/asiaandthepacific/selected-projects.html>

## Journals

### Other readings

1. UNEP, 2012. Global Outlook on SCP Policies: Taking action together. Available at: [http://www.unep.org/pdf/Global\\_Outlook\\_on\\_SCP\\_Policies\\_full\\_final.pdf](http://www.unep.org/pdf/Global_Outlook_on_SCP_Policies_full_final.pdf)
2. SWITCH-Asia Projects, Case studies. See: [http://www.switch-asia.eu/publications/?tx\\_switchasia\\_publications\[category\]=3&cHash=187075de03e4a5e1f168fb8ab798b9fb](http://www.switch-asia.eu/publications/?tx_switchasia_publications[category]=3&cHash=187075de03e4a5e1f168fb8ab798b9fb)
3. SWITCH-Asia Project Impact Sheet: Green Retail India – Greening the food and beverage supply chain in India. Available at: <http://www.switch-asia.eu/publications/greening-the-food-and-beverage-supply-chain-in-india/>
4. UNEP, 2010. ABC of SCP – Clarifying Concepts on Sustainable Consumption and Production: Towards a 10-Year Framework of Programmes on Sustainable Consumption and Production.
5. UNEP, 2012. Sustainable Consumption and Production for Poverty Eradication. Available at: [http://www.unep.org/10yfp/Portals/50150/downloads/publications/poverty/SCP\\_for\\_Poverty\\_full.pdf](http://www.unep.org/10yfp/Portals/50150/downloads/publications/poverty/SCP_for_Poverty_full.pdf)
6. UNEP, 2015. Sustainable Consumption and Production Indicators for the Future SDGs. Available at: [http://www.scpclearinghouse.org/upload/publication\\_and\\_tool/file/440.pdf](http://www.scpclearinghouse.org/upload/publication_and_tool/file/440.pdf)
7. UNDP-UNEP, 2014. Building Inclusive Green Economies – Stories of Change from the Poverty-Environment Initiative in Asia-Pacific.
8. UNEP, 2013. Redefining Ecolabels to Improve Sustainability and Trade in Developing Countries: Lessons and Recommendations from the UNEP project
9. SWITCH-Asia Case Study: Up-scaling Biogas Technology for Sustainable Development and Mitigating Climate Change in Sri Lanka. Available at: <http://www.switch-asia.eu/publications/bio-gas-case-studies/>
10. UNEP, 2009. Mainstreaming Sustainable Consumption and Production and Resource Efficiency into Development Planning. Available at: <http://www.unep.fr/shared/publications/pdf/DTIx1235xPA-MainstreamingSCPintoDevPlanning.pdf>
11. UNEP, 2014. The Business Case for Eco-Innovation.
12. UNEP, 2015. Indicators for a Resource Efficient and Green Asia and the Pacific - Measuring progress of sustainable consumption and production, green economy and resource efficiency policies in the Asia-Pacific region. Schandl, H., West, J., Baynes, T., Hosking, K., Reinhardt, W., Geschke, A., and

Lenzen, M. United Nations Environment Programme, Bangkok. Available at: [http://www.switch-asia.eu/fileadmin/user\\_upload/RPSC/Publications/Indicator-for-a-RE\\_Low-resolution\\_.pdf](http://www.switch-asia.eu/fileadmin/user_upload/RPSC/Publications/Indicator-for-a-RE_Low-resolution_.pdf)

13. SWITCH-Asia SCP E-book Module 2 (3rd Edition) - Designing and Implementing National SCP Policies: The Policy Cycle and SCP in National Governance Structures
14. UNEP, 2012. Sustainable Consumption and Production: A Handbook for Policy Makers with Cases from Asia and the Pacific (First Edition)
15. UNEP, 2015. Sustainable Consumption and Production: A Handbook for Policymakers, Second Edition – Asia-Pacific Region.
16. Castro-Hallgren, S., 2016. UNEP Background Paper to Inform National Policy Activities in India on Sustainable Consumption and Production in 2016
  
17. UNEP, 2013. SWITCH-ASIA Regional Policy Support Component, Capacity Building and Policy Needs Assessment for Sustainable Consumption and Production. Available at: [www.switch-asia.eu/.../policy-assessment/Needs-Analysis-Final-report.pdf](http://www.switch-asia.eu/.../policy-assessment/Needs-Analysis-Final-report.pdf)
18. SWITCH-Asia, 2014. Access to Finance for SMEs – Engaging in Sustainable Consumption and Production Practices. Available at: [http://www.switch-asia.eu/fileadmin/user\\_upload/Switch-AsiaMAG\\_Winter14-15\\_Screen.pdf](http://www.switch-asia.eu/fileadmin/user_upload/Switch-AsiaMAG_Winter14-15_Screen.pdf)
19. UNEP, 2010. Pre-SME – Promoting Resource Efficiency in Small & Medium Sized Enterprises.
20. UNEP, 2013. Sustainable Public Procurement: A Global Review.

**Additional information (if any):**

This first-of-its-kind post graduate course on Sustainable Consumption and Production has been developed for young policy and decision makers as part of the SWITCH-Asia Regional Policy Support Component supported by UNEP and European Union.

**Student responsibilities:**

Attendance, feedback and discipline: As per university rules.

**Course reviewers:**

1. Dr Suneel Pandey, TERI
2. Dr Malini Balakrishnan, TERI