GREEN ECONOMY AND TRADE

E-LEARNING COURSE SYLLABUS

TABLE OF CONTENTS

1. BACKGROUND ................................................. 3
2. TARGET AUDIENCE ........................................ 4
3. LEARNING OBJECTIVES ..................................... 4
4. MODULES ..................................................... 5
5. LEARNING METHODOLOGY ............................... 8
6. STUDY PLAN AND WORKLOAD ............................. 9
7. LEARNING ASSESSMENTS AND COMPLETION REQUIREMENTS .................. 10
8. COURSE SUPPORT TEAM .................................... 11
9. COURSE EVALUATION ........................................ 11
10. TECHNICAL REQUIREMENTS ............................... 11
11. KEY REFERENCES ............................................. 12
World trade patterns reveal that developing countries, and particularly least developed countries, still depend heavily on natural resource based products and raw materials for their exports. Significant opportunities exist for developing and developed countries to achieve long-term and sustainable economic development by diversifying their economies and benefitting from the growing global demand for green goods and services. Even though the relative share of trade in certified products and in environmental goods and services (EGS) on the global markets is still small, in absolute terms it is on the rise. For example, the global market in low-carbon and energy efficient technologies is projected to increase to US$ 2.2 trillion by 2020. Developing countries with abundant renewable resources are well-positioned to increase their share in international markets and participate in value chains for EGS.

To meet the learning needs and build capacities of national stakeholders, the United Nations Institute for Training and Research (UNITAR) has joined the United Nations Environment Programme (UNEP), represented by its Trade, Policy and Planning Unit, to develop the e-learning course “Green Economy and Trade”. This course is delivered within the framework of the Partnership for Action on Green Economy (PAGE), a one-UN initiative, encompassing UNEP, UNIDO, ILO, UNDP, and UNITAR.

The interactive and practice-oriented course seeks to provide interested participants from government, business and civil society with an introduction to various approaches to promote and harness opportunities related to sustainable trade.
TARGET AUDIENCE

The course targets groups and individuals from the public, private, and civil society sectors, interested in learning about how sustainable and responsible trade can help to further green economy objectives, and vice versa. Course participants will include practitioners whose decisions can impact the sustainability of trade, and who are well-placed to benefit from the opportunities arising at the trade and environment nexus. They include:

- Policy makers involved in developing and setting up policy frameworks for sustainable development, and in particular sustainable trade (ministries of trade and environment etc.)
- Private sector/industry representatives, esp. SMEs, interested in understanding the economic opportunities from trade in environmental goods and services (in terms of market access etc.)
- Civil society representatives with an interest in promoting sustainable development and trade

LEARNING OBJECTIVES

Participants will learn about the basic principles and trends in the international governance and law of trade and environment, and about ways to identify, assess and harness opportunities related to sustainable trade. Additionally, participants will begin to acquaint themselves with basic skills and tools for applying the green economy and trade approach to a real world policy or business context. After completing the course, participants will be able to:

- Interpret current developments and trends related to Green Economy and Trade
- Discuss basic principles related to the international governance of trade and the way the international trade framework can foster sustainability
- Discuss opportunities, challenges, and enabling conditions for developing countries to benefit from growing trade in EGS
- Identify possibilities for greening trade in specific sectors, foremost renewable energy and agriculture
- Apply the green economy approach to a real life trade-related case study
The modules cover the following topics:

<table>
<thead>
<tr>
<th>Module</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1</td>
<td>The trade and environment nexus: key concepts, trends and developments</td>
</tr>
<tr>
<td>Module 2</td>
<td>Opportunities and enabling conditions for greening trade</td>
</tr>
<tr>
<td>Module 3</td>
<td>Assessing and seizing sustainable trade opportunities in specific Green Economy sectors</td>
</tr>
<tr>
<td>Elective 1: Assessing and Seizing Sustainable Trade Opportunities in the Agricultural Sector</td>
<td></td>
</tr>
<tr>
<td>Participants interested in trade in natural resources – e.g. agriculture, fisheries, forestry, water sector etc., are invited to join this elective.</td>
<td></td>
</tr>
<tr>
<td>Elective 2: Assessing and Seizing Sustainable Trade Opportunities in the Energy Sector</td>
<td></td>
</tr>
<tr>
<td>Participants interested in trade in built capital – e.g. manufacturing, etc., are invited to join this elective</td>
<td></td>
</tr>
<tr>
<td>Module 4</td>
<td>International trade governance and law: basic concepts and principles</td>
</tr>
</tbody>
</table>

Module 1: The Trade and Environment Nexus: Key Concepts, Trends and Developments

Module 1 discusses the relation between trade and the environment, including historical development and current trends.

Lesson 1 provides background knowledge on the linkages between trade liberalisation and environmental protection.

Lesson 2 identifies and assesses the main perceived challenges that trade liberalization and the Green Economy pose for one another.

Lesson 3 centres on the main potential benefits of advancing green economy through trade, and vice versa.

Lesson 4 highlights current trends at the trade and environment nexus, looking at trends of investment in EGS, shifts in energy production, and developments in trade governance.

After completing the module, participants will be able to:

- Discuss the evolution of both international trade and environmental governance
- Identify the main perceived challenges arising from trade liberalisation for the transition to an inclusive green economy
- Identify the main potential benefits of trade liberalisation for a transition to an inclusive green economy
- Assess the current trends illustrating the connection between trade and green economy
Module 2 focuses on opportunities, enabling conditions and possible policy actions for advancing green trade.

Lesson 1 considers structural aspects of enabling trade in EGS and looks into available tools for trade policy design and assessment.

Lesson 2 identifies trade-related opportunities (from the standpoint of both policy and business) in key sectors, as well as with regard to generating green jobs.

Lesson 3 discusses specific actions at international and national level that can be taken to seize those opportunities.

After completing the module, participants will be able to:

- Discuss specific actions at the international and national level that can be taken to seize opportunities at the nexus of trade and environment
- Explain the link between trade in EGS in key sectors and green jobs creation
- Highlight key areas for international cooperation on green trade policies
- Give examples of country-level policies and best practices to enable trade in EGS

Module 3A focuses on identifying and assessing sustainable trade opportunities in the agricultural sector. Key enabling conditions and possible policy actions for advancing trade related to sustainable agriculture are identified. This elective is suitable for policy makers and practitioners working in the area of natural resource use more generally, including agriculture, forestry, fisheries, and the water sector.

Lesson 1 introduces the link between agriculture, trade and the environment, and outlines benefits of greening the agricultural sector.

Lesson 2 discusses specific areas where trade could be harnessed to promote green agriculture.

Lesson 3 takes a cross-cutting look at the areas discussed in the previous lesson and identifies a number of trade-related enabling conditions and measures that could foster sustainable agriculture and greater uptake of certification.

Lesson 4 provides a country-level case study, of the opportunities and challenges facing South-Africa’s shift to organic farming and related exports.

After completing the module, participants will be able to:

- Discuss the link between agriculture, trade and the environment, and the benefits of greening agricultural practices
- Identify trade-related opportunities in connection with sustainable agriculture, organic products, enhanced certification and related products and services
- Highlight enabling conditions and possible actions for successful trade-related agricultural policy in the green economy
- Analyze the potential for a shift to sustainable agriculture in country-specific contexts
- Discuss country examples of best practices
Module 3B focuses on identifying and assessing sustainable trade opportunities in the energy sector. Key enabling conditions and possible policy actions for advancing trade related to renewable energy and energy efficiency are identified. This elective is suitable for policy makers and practitioners working in the area of trade in built capital, i.e. manufacturing, infrastructural, building sectors.

Lesson 1 provides background information on the energy dimension of the trade and green economy nexus. After completing the module, participants will be able to:

- Discuss the link between energy, trade and the environment, and the benefits of renewable energy and energy efficiency
- Identify opportunities linked to trade of EGS in the energy sector (e.g. renewable energy equipment, electricity and services, biofuels, energy efficiency technologies, etc.)
- Highlight enabling conditions and possible actions for successful trade-related energy policy
- Analyse the potential for a shift to clean energy in country-specific contexts
- Discuss country examples of best practices

Lesson 2 discusses specific areas where trade could be harnessed to promote renewable energy and energy efficiency.

Lesson 3 takes a cross-cutting look at the areas discussed in the previous lesson and identifies a number of trade-related enabling conditions and measures that could advance renewable energy and energy efficiency.

Lesson 4 provides a country-level case study, of the opportunities and challenges facing Ghana’s solar (electricity and equipment) export potential.

Module 4 widens the focus and looks at basic concepts and principles of the international governance and law at the nexus of trade and environment.

Lesson 1 covers the basic legal principles governing the trade and environment nexus at the multilateral level. After completing the module, participants will be able to:

- Explain the foundations of global trade governance under the WTO framework
- Discuss the relations between trade regulation and environmental protection under the WTO framework
- Outline the operation of the rules governing production processes and methods, renewable energy support systems, and environmental goods and services
- Outline the operation of the key sustainable development provisions in free trade agreements and bilateral investment treaties

Lesson 2 discusses trade governance at the plurilateral and bilateral levels, including so-called mega-regionals, and the relation between the multilateral trading system and plurilateral / bilateral agreements.
The course features the following instructional elements:

<table>
<thead>
<tr>
<th><strong>Video Presentations</strong></th>
<th><strong>Discussion Fora</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Each module starts with a short video (about 2–3 minutes) where a relevant Green Trade expert discusses the topic at hand and underlines the main knowledge points of the module with illustrative insights from own experience. The video presentations set the focus for the learning week and direct participants’ attention to the instructional materials of the respective module.</td>
<td>Each week, the course facilitator will initiate a discussion in a designated online space to foster interaction and reflection on specific issues linked to the module topic and objectives. Participants are also able and encouraged to initiate discussion threads themselves. Contributions are directly posted in an online forum where they are available to all learners.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Interactive Lessons</strong></th>
<th><strong>Assessment Tests</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>This course element consists of brief interactive slides that guide the learner through the key messages of the module. The interactive lessons serve to present the content of the learning journals in a concise and user-friendly form, providing the opportunity to test one’s knowledge and reflect on key concepts.</td>
<td>At the end of each module, participants take an assessment test that corresponds to the learning objectives for the module. The test appraises the comprehension of key facts and concepts discussed in the module. Successful completion of 3 out of 4 assessment tests is a necessary requirement for completion of the overall course.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Learning Journals</strong></th>
<th><strong>Applied Case Study and Peer Review</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Each week, a learning journal is made available to participants through the online learning platform. The learning journals summarize the core module content from a range of documents and feature a body of knowledge directly responding to the learning objectives in an interactive and learner-friendly browser-style format. They are available in a downloadable PDF version to allow offline learning. Additional resources and reading materials are offered or suggested to help participants deepen their understanding of specific issues depending on their particular needs and interests. Complementary glossaries provide definitions of relevant concepts and technical terms for each module.</td>
<td>After completion of all the course modules, learners will individually develop an Action Plan that applies the green economy concept, as demonstrated through the course, to a real-life trade situation in a specific country, region, sector, or company. Learners are free to independently choose a real-life example/situation that meets their needs, interests, and experience. While preparing the case study, participants identify a concrete problem context and relevant issues, and define appropriate measures, resources and means of implementation. In developing an Action Plan, participants are encouraged to take into account the learning materials provided throughout the course. Each participant peer-reviews two Action Plans submitted by other participants. To ensure that their Action Plan receives a peer review, it is important that participants meet the deadlines for this course component.</td>
</tr>
</tbody>
</table>
## STUDY PLAN AND WORKLOAD

### COURSE SEQUENCE

Each week, participants will have access to a new module. Once available, modules will remain accessible until the end of the course. Before moving from one module to another, participants are advised to complete the mandatory readings (i.e. the learning journals) and take the assessment test. It is recommended that participants complete all the mandatory and optional learning activities related to one module over a week’s period. The last week (wrap-up week) of the course will allow participants to review the course and make final revisions to their applied case study based on the peer reviews.

### LEARNING HOURS

The estimated study time is 32 hours over a 6-week period. The average amount of work expected for the completion of the course is 5 hours during the first 4 weeks. The completion of course assignments during weeks 5 – 6 will require additional 10 – 12 hours of work.

### OVERVIEW OF STUDY PLAN

During weeks 1–4 the study of learning journals is complemented by a range of learning activities and experiences such as discussion fora, and interactive exercises. From the outset of the course, learners are informed of the mandatory requirement to develop a Green Economy & Trade Action Plan for completion of the course. As early as week 3, participants are advised to start developing their Action Plans, which are to be submitted during week 5 of the course. In the final week of the course learners peer-review two studies developed by fellow course participants.

<table>
<thead>
<tr>
<th>Week</th>
<th>Estimated time</th>
<th>Activity</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1/</td>
<td>5 hours</td>
<td>Read Learning Journal 1</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Module 1</td>
<td></td>
<td>Consult complementary readings and external links</td>
<td>Optional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Take assessment test 1</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Participate in forum discussion 1</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Week 2/</td>
<td>5 hours</td>
<td>Read Learning Journal 2</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Module 2</td>
<td></td>
<td>Consult complementary readings and external links</td>
<td>Optional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Take assessment test 2</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Participate in forum discussion 2</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Complete interactive exercise</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Week 3/</td>
<td>5 hours</td>
<td>Read Learning Journal 3</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Module 3</td>
<td></td>
<td>Consult complementary readings and external links</td>
<td>Optional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Take assessment test 3</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Participate in forum discussion 3</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Week 4/</td>
<td>5 hours</td>
<td>Read Learning Journal 4</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Module 4</td>
<td></td>
<td>Consult complementary readings and external links</td>
<td>Optional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Take assessment test 4</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Participate in forum discussion 4</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Develop Action Plan</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Week 5</td>
<td>6 hours</td>
<td>Develop and submit Action Plan</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Week 6</td>
<td>6 hours</td>
<td>Submit peer review of 2 Action Plans</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Complete outstanding activities and the course evaluation questionnaire</td>
<td>Mandatory</td>
</tr>
</tbody>
</table>
LEARNING ASSESSMENTS AND COMPLETION REQUIREMENTS

ASSESSMENT TESTS
For each assessment test participants will be allowed 3 attempts. In order to receive the Certificate of Completion, participants need to complete 3 out of 4 assessment tests with a score higher than 70%. It is recommended that assessment tests are taken in conjunction with their corresponding module. However, recognizing the existence of different learning paths and the professional occupation of most participants, all assessment tests will remain available online until the end of the course.

INDIVIDUAL ACTION PLAN AND PEER REVIEW
The individual Action Plan resembles an applied case study and should be 4 – 5 pages long, respecting the following set of characteristics:

- Address a specific issue/problem/challenge
- Have clear objectives and expected results
- Comprise specific measures/activities
- Contribute to advancing (opportunities for) sustainable trade in a real world context

In addition, each course participant should prepare 2 peer reviews of Action Plans developed by fellow course participants. Peer reviews should have a length of approximately 1 page each.

All Action Plan submissions will receive individualized feedback from the Course Moderator within one month following the end of the course.

OVERALL PARTICIPATION
The overall participation in the discussion forums and other interactive activities will be assessed by the course moderator and the UNITAR team at the end of the course. A record of active participation is a mandatory requirement for successful completion of the course. Regular participation can also compensate insufficient performance in other activities and/or tests.

CERTIFICATE OF COMPLETION
All successful participants will receive a Certificate of Completion by UNITAR. In order to receive the Certificate, participants need to:

- Complete 3 out of 4 assessment tests with result equal or higher than 70%
- Participate actively in the discussion fora
- Submit a case study Action Plan of 4 – 5 pages, and provide 2 peer reviews of 1 page each.

The Certificate of Completion will be sent out to successful participants within one month of the course ending date.
COURSE SUPPORT TEAM

COURSE MODERATOR
The course is moderated by an international expert with extensive knowledge and experience in the area of environment and trade. Throughout the course, learners have the opportunity to consult with the Moderator, via the forum section “Questions to the Moderator”, where direct inquiries related to the content of the course can be posted.

Furthermore, the Course Moderator promotes participation and interaction among the students, by actively facilitating the discussion fora. The Course Moderator posts one particular question at the beginning of each course week, monitors the discussion and provides feedback to inputs by participants, and sums up the main viewpoints of the discussion at the end of the week.

The Course Moderator also provides feedback on regular basis to course activities and exercises, and monitors, evaluates and gives personalized feedback to students with regard to their applied case studies, as well as their overall performance in the course.

UNITAR SUPPORT TEAM
UNITAR provides continuous administrative, technical, and substantive support to participants throughout the delivery of the course.

The course is methodologically supported by several UNITAR units, including Knowledge Systems Innovation, Monitoring and Evaluation, Communications, and Administrative and Finance Services.

COURSE EVALUATION
To collect participants' views of the course, a final evaluation questionnaire is made available under the “Course Wrap-up” section (week 6) of the course. Completing an evaluation is mandatory for all participants, and learners' feedback and suggestions will be taken into account in view of improving future editions of the course.

TECHNICAL REQUIREMENTS
Access to internet is an essential condition for participation. UNITAR also recommends the following as a minimum in hardware and software to take this e-Learning course:

- **Platform**: Windows XP / Windows Vista / Windows 7; MacOSX
- **Browser**: Internet Explorer 8 or higher, or Mozilla Firefox
  Note: Java, cookies and pop-ups must be enabled.
KEY REFERENCES


Fair Trade Labelling Organizations, Monitoring the Scope and Benefits of Fair Trade (4th edn. 2012)

FAO and OECD, Sustainable Agricultural Productivity Growth and Bridging the Gap for Small-Family Farms (2012)

FAO, Organically Produced Foods (2007)

FAO, The State of Food and Agriculture (2012)


ICTSD, Tackling Perverse Subsidies in Agriculture, Fisheries and Energy (2012)


ILO, Skills for Green Jobs – A Global View (2011)


IPPC, Standards and Standards Setting (2012)


ILO, Skills for Green Jobs – A Global View (2011)


ILO, Skills for Green Jobs – A Global View (2011)


OECD, Agriculture Policy Monitoring and Evaluation 2012 (2012)


UN, Sustainable Energy for All (2012)


UNEP and IFOAM, Organic Agriculture: A Step Towards the Green Economy in the Eastern Europe, Caucasus, and the Central Asia Region. Case studies from Armenia, Moldova and Ukraine (2011)


UNEP, Towards Sustainable Production and Use of Resources – Assessing Biofuels (2009)

UNEP, Green Economy – Developing Countries Success Stories (2010)


UNEP, Financing renewable energy in developing countries (2012)


UNEP, Avoiding Future Famines: Strengthening the Ecological Foundation of Food Security through Sustainable Food Systems (2012)

UNEP, Green Economy and Trade. Trends, Challenges and Opportunities (2013)

UNEP, Multiple Pathways to Sustainable Development. Initial Findings from the Global South (2015)


UNEP, Ghana Solar Export Potential Study (2015)


UNEP, Trade in Certified Organic Agriculture - Challenges and Opportunities for South Africa (2016)


The report is published as part of the Partnership for Action on Green Economy (PAGE) – an initiative by the United Nations Environment Programme (UNEP), the International Labour Organization (ILO), the United Nations Development Programme (UNDP), the United Nations Industrial Development Organization (UNIDO) and the United Nations Institute for Training and Research (UNITAR).

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. The PAGE Secretariat would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from the PAGE Secretariat.

Course authors
Prof. J. E. Vinuales (Cambridge University);
Lennart Kuntze (UNEP); Maya Valcheva, Giuliano Montanari (UNITAR)

Contributors
Anja von Moltke, Ying Zhang, John Maughan (UNEP); Amrei Horstbrink,
Angus Mackay (UNITAR)

Graphic designer
Julia Vogel, www.juliaworks.com

UNITAR would like to acknowledge the excellent collaboration with the UNEP Economy and Trade Branch, in developing and delivering this e-learning course.

Disclaimer
This publication has been produced with the support of PAGE funding partners. The contents of this publication are the sole responsibility of PAGE and can in no way be taken to reflect the views of any Government. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the PAGE partners concerning the legal status of any country, territory, city or area or of its authorities, or concerning delimitation of its frontiers or boundaries. Moreover, the views expressed do not necessarily represent the decision or the stated policy of the PAGE partners, nor does citing of trade names or commercial processes constitute endorsement.
For information about the Green Economy and Trade e-course:
Green Development and Climate Change Programme, UNITAR
International Environment House 1
Chemin des Anémones 11 – 13,
CH-1219 Châtelaine-Geneva
Switzerland
Email: page@unitar.org
Website: www.unitar.org/event

For further information on PAGE:
PAGE Secretariat
UNEP/Economic and Trade Branch
11 – 13 Chemin des Anémones
CH-1219 Chatelaine-Geneva
Switzerland
page@unep.org

www.un-page.org
facebook.com/greeneconomyunep
twitter.com/PAGEXchange