





### Sixth UNWTO International Conference on Tourism Statistics MEASURING SUSTAINABLE TOURISM

Manila, Philippines, 21 – 24 June 2017

### **Employment, Green Jobs and Sustainable Tourism**

Session 3. Employment: a Key Aspect of the Social Dimension of Sustainable Tourism

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### **Summary**

Tourism development is seen as a way of improving a country's economy and social wellbeing, but if this development is not handled carefully, tourists will migrate to competing destinations or attractions. In the future, there will be mounting pressure to develop tourism products with a sustainable focus, helping to fit in with the local environment and ensure its preservation.

Consequently, sound tourism policy should be geared towards more sustainable tourism. Tourism characteristic industries produce tourism characteristic products and this process is directly linked with tourism characteristic activities. These are employment related activities or tourism characteristic jobs.

The 2030 Agenda embraces the three dimensions of sustainability – economic, social and environmental. The ILO's Green Jobs Programme signals the organisation's commitment to act on climate change and to promote resource efficient and low-carbon societies.

The first meeting of the Working Group of Experts on Measuring Sustainable Tourism (MST) has agreed that developing a statistical framework for sustainable tourism is a priority to support integrated policy responses at national and destination level, and urged UNWTO to lead this effort. The Seventeenth Meeting of the Committee on Statistics and Satellite Account agreed, inter alia, that an important part of measuring sustainable tourism is understanding the extent and nature of activities undertaken in tourism characteristic industries that can be considered environmental or green. Those employed to undertake these activities would then represent green employment or green jobs.

The paper presents an overview of employment and tourism related SDGs, concepts and definitions of sustainable tourism and green jobs, and discusses a possible use of TSA Table 7 as a basis for compiling a new TSA Table on "Green employment in the tourism industries" to supplement other sustainable tourism indicators to be produced within the statistical framework for the measurement of sustainable tourism.

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#### Introduction<sup>2</sup>

Tourism is a major engine for job creation and a driving force for economic growth and development. Thus, according to the World Travel and Tourism Council data, in 2015 tourism directly created over 107 million jobs (3.6 per cent of total employment representing 3 per cent of total GDP) and supported (directly and indirectly) a total of 284 million jobs, equivalent to one in 11 jobs (direct and indirect)in the world. By 2026, these figures are expected to increase to 136 and 370 million jobs respectively representing one in nine of all jobs worldwide. In many countries, the tourism sector employs more women and young people than most other sectors. Globally, the majority of workers are under 35 years of age, half of whom are 25 or under<sup>3</sup>.

Tourism development is seen as a way of improving a country's economy and social wellbeing. Tourism enterprises are an important source of innovation and economic diversification and contribute to shaping development of destination countries, particularly through domestic purchases of goods, services inputs and investment flows. Tourism thus holds the potential to improve living conditions, promote social inclusion and reduce poverty, but if tourism development is not handled carefully, tourists will move to competing destinations or attractions. In the future, there will be mounting pressure to develop tourism products with a sustainable focus, helping to fit in with the local environment and ensure its preservation.

The UNWTO has defined sustainable tourism as "tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities" It should generate local prosperity, decent work, promote environmental awareness, conserve and protect the environment, respect wildlife, flora, biodiversity, ecosystems and cultural diversity, and improve the welfare and livelihoods of local communities by supporting their local economies and the human and natural environment as a whole.<sup>5</sup>

Consequently, sound tourism policy should be geared towards more sustainable tourism. Tourism-characteristic industries produce tourism-characteristic products and this process is directly linked with tourism-characteristic activities. These are employment related activities or tourism-characteristic jobs.

The Sustainable Development Agenda 2030 embraces three dimensions of sustainability – economic, social and environmental.

In this process, the ILO is emerging as the custodian agency for most of the indicators identified in the Global Indicator Framework to measure progress towards Goal 8 that aims to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. Decent Work as a concept encompassing the combination of quality jobs, covered by social protection

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<sup>&</sup>lt;sup>2</sup> While preparing this paper, the author has reviewed, studied, quoted and used numerous official documents produced by the ILO, the UNWTO, the UNEP and the UN, as well as subject-specific publications, conference papers and other relevant materials that have been accurately referenced and listed in the bibliography with thanks for the ideas and views presented there. The author would like to thank Mr Rafael Diez de Medina, ILO Chief Statistician and Director of the Department of Statistics, Ms Lucie Servoz, Hotels, Catering and Tourism Technical Officer, ILO Sectoral Policies Department, and Ritash Sarna, Head of Management and Support Unit, ILO Department of Statistics, for their comments, suggestions and a thorough overall review of the paper.

<sup>&</sup>lt;sup>3</sup> International Labour Organization. ILO Guidelines on Decent Work and Socially Responsible Tourism, 2017.

<sup>&</sup>lt;sup>4</sup> UNWTO and UNEP. *Making Tourism More Sustainable – A Guide for Policy Makers*. UNWTO, Madrid and UNEP, Paris 2005; available at: http://www.unep.fr/shared/publications/pdf/DTIx0592xPA-TourismPolicyEN.pdf

<sup>&</sup>lt;sup>5</sup> United Nations. *Future We Want*, Outcome document of the United Nations Conference on Sustainable Development, annex to the resolution No. 66/288 adopted by the United Nations General Assembly, 2012.

and sound social dialogue mechanism and respectful of rights at work, is at the heart of the new global development paradigm and enshrined in at least 10 of the 17 SDGs. Moreover, like tourism, ten substantive elements of Decent Work<sup>6</sup> are found in all 17 goals.

Tourism has the potential to contribute, directly or indirectly, to all of the Sustainable Development Goals (SDGs). In particular, it has been included as a target in SDGs 8, 12 and 14 on inclusive and sustainable economic growth, sustainable consumption and production (SCP) and the sustainable use of oceans and marine resources, respectively.

Sustainable tourism is firmly positioned in the 2030 development agenda, while the tourism sector's contribution to job creation is recognised in target 8.9: "By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products".

Hence, there is a clear interrelationship between the ILO's and UNWTO's activities geared towards shaping the SDGs. This has the potential to become a new area of collaboration between the UNWTO and the ILO.

In 2015, the UNWTO established the Measurement of Sustainable Tourism (MST) project. The ambition of the MST project is to develop a statistical framework for the multiple domains of sustainable tourism, such that there is (i) a standardised framework for the collection of information; (ii) a means to integrate tourism statistics with other economic, social and environmental information; and (iii) a coherent information base for the derivation of indicators that are relevant for the monitoring and analysis of sustainable tourism. Notably, one outcome of this project will be updating the section of the International Recommendations on Tourism Statistics pertaining to sustainable development and sustainability.

Further, according to the UNWTO initiative, sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations, including mass tourism and the various niche tourism segments. Sustainability principles refer to the environmental, economic and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability.

The First Meeting of the Working Group of Experts on Measuring Sustainable Tourism, held in October 2016, has agreed that developing a statistical framework for sustainable tourism is a priority to support integrated policy responses at national and destination level, and urged UNWTO to lead this effort. At the follow-up MST's task force meeting, it was agreed, *inter alia*, that an important part of measuring sustainable tourism is understanding the extent and nature of activities undertaken by tourism businesses (in tourism characteristic industries) that can be considered environmental or green. Those employed to undertake these activities would then represent green employment or green jobs.<sup>8</sup>

The paper consists of an introduction, three chapters, conclusion and four annexes.

<sup>&</sup>lt;sup>6</sup> Ten substantive elements of Decent Work: employment opportunities; adequate earnings and productive work; decent working time; combining work, family and personal life; work that should be abolished; stability and security at work; equal opportunity and treatment in employment; safe work environment; social security; social dialogue.

<sup>&</sup>lt;sup>7</sup> UNWTO. Tourism and the SDGs; available at: http://icr.unwto.org/content/tourism-and-sdgs

<sup>&</sup>lt;sup>8</sup> UNWTO. Proposed MST research Programme. Seventeenth Meeting of the Committee on Statistics and Satellite Account. Madrid, Spain, 24-25 January 2017; available at: http://cf.cdn.unwto.org/sites/all/files/pdf/item\_7.2\_mst\_research.pdf

Manila, Philippines, 21 – 24 June 2017

Chapter 1 gives an overview of the activities and major outputs produced within the framework of the ILO/UNWTO Joint Initiative on Tourism, Employment and Decent Work, covering the period of 2007-2017. It also contains a short presentation of the UNWTO initiative to measure sustainable tourism and its project *Towards a Statistical Framework for Measuring Sustainable Tourism*. Finally, the ILO's Green Jobs Programme is presented in relation to the green jobs dimension of sustainable tourism.

Chapter 2 views sustainable tourism as a driving force for job creation and development. It presents the salient features of the recently adopted *ILO guidelines on decent work and socially responsible tourism* and looks at the SDGs as a matrix for convergence of employment, development, decent work and sustainable tourism.

Chapter 3 proposes an approach to measuring green jobs; explores the use of green jobs as a measure of sustainable tourism; and discusses a possibility of extending TSA Table 7 to compile additional sustainable tourism indicators within the framework of the Proposed MST Research Programme.

Annex I includes *Recommendations* of the UNWTO Seminar: Employment in Tourism – Realizing its Full Potential: Recommendations (19-20 November 2013).

Annex II comprises the 18 indicators for which the ILO is custodian or and involved agency.

Annex III presents an overview of concepts and definitions related to the green economy

Annex IV contains Classification of Environmental Activities - Overview of groups and classes.

#### 1. From Bali 2009 to Manila 2017: ILO/UNWTO Joint Initiatives and Collaboration

The events and outputs described in this Chapter refer to the period covering a decade of close cooperation between the ILO and the UNWTO in the implementation of statistics-oriented initiatives on employment and decent work in the tourism industries.

Notably, the period of joint collaboration overarches the following two major international events in the world of tourism statistics: The Fifth UNWTO International Conference on Tourism Statistics - Tourism: An Engine for Employment Creation (Bali, Indonesia, 30 March – 2 April 2009) and the Sixth UNWTO International Conference on Tourism Statistics - Measuring Sustainable Tourism (Manila, Philippines, 21 – 24 June 2017).

The fifth conference marked a significant milestone in tourism statistics, following the ratification by the Unite Nations Statistics Commission of the *International Recommendations for Tourism Statistics* 2008 (IRTS 2008).

The Conference had two objectives. The first was to discuss the way forward following the ratification of the new recommendations, as well as the adoption of the *Tourism Satellite Account: Recommended Measurement Framework* (TSA:RMF 2008). The second objective was to address the issue of the measurement and quality of employment in the tourism industries.<sup>9</sup>

At the Conference, the ILO and UNWTO announced launching of a set of joint statistical initiatives which had been geared towards enhancing the national capacity in measuring employment in the tourism industries and improving international comparability of employment–related tourism statistics.

Symbolically, the Sixth UNWTO International Conference on Tourism Statistics - Measuring Sustainable Tourism (Manila, Philippines, 21-24 June 2017) has been convened on the occasion of the International Year of Sustainable Tourism for Development 2017.

The Manila Conference is a landmark opportunity to discuss methodological advances, explore emerging issues and learn from pioneering country experiences in this area of measurement. UNWTO recognises that, apart from being a technical exercise, the development and implementation of a statistical framework for sustainable tourism is very much a strategic endeavour that will require stakeholder engagement, inter-institutional coordination and political leadership.

Various technical sessions are being organised to discuss a Statistical Framework for Measuring Sustainable Tourism (MST) developed by the Measuring Sustainable Tourism (MST) Working Group.<sup>10</sup>

Particularly, a special technical session is organised on *Employment and other aspects of the Social Dimension of Sustainable Tourism*. The MST initiative considers three dimensions of sustainability (environmental, economic and social). This session addresses employment as a key consideration of the social dimension and highlights how these data and the important cultural aspects of tourism may

<sup>&</sup>lt;sup>9</sup> UNWTO. *The Bali Conference: UNWTO Findings and Evaluation*. 5<sup>th</sup> UNWTO International Conference on Tourism Statistics - Tourism: An Engine for Employment Creation (Bali, Indonesia, 30 March – 2 April 2009); available at: http://cf.cdn.unwto.org/sites/all/files/pdf/findings\_statement.pdf

<sup>&</sup>lt;sup>10</sup> UNWTO. The Sixth UNWTO International Conference on Tourism Statistics Measuring Sustainable Tourism (Manila, Philippines, 21-24 June 2017). *Concept Note*; available at:

http://cf.cdn.unwto.org/sites/all/files/pdf/concept\_note\_philippines\_format.pdf

be incorporated to provide an integrated data view. The ILO is moderating the session and presenting the central paper, thereby enhancing fruitful and successful collaboration established between the two organizations ten years ago.

#### 1.1. ILO/UNWTO Joint Initiative on Tourism, Employment and Decent Work

The travel and tourism industry is one of the world's largest industries with a global economic contribution (direct, indirect and induced) of over 7.6 trillion U.S. dollars in 2016. The direct economic impact of the industry, including accommodation, transportation, entertainment and attractions, was approximately 2.3 trillion U.S. dollars that year. A number of countries, such as France and the United States, are consistently popular tourism destinations, but other, less well-known countries are quickly emerging in order to reap the economic benefits of the industry.<sup>11</sup>

Tourism involves a wide range of different activities, types of establishments, employment contracts and working arrangements. It provides working people with income and working experience and therefore contributes to their social inclusion and personal development. The tourism employment pattern is characterised by notable differences between regions of a country and between seasons of the year.

Employment is of major importance in the economic analysis of productive activities and this is true also of tourism. The focus on employment in the tourism industries is further justified by the fact that tourism industries have matured into a major consumer market experiencing increasing global and national competition, market turbulence and changes in consumer demand. These changes are deserving of attention, not only to understand the quality of the tourism products and services, but also to understand the quality in human resources - one of the major assets of the tourism industries. 12

However, the facts and findings presented in specialised publications and discussions held at international meetings, workshops and conferences continue to confirm that the world of work in tourism, in general, and the economic value of tourism in terms of employment, as source of productive labour in particular, remain inadequately measured and insufficiently studied. Employment in the tourism industries needs to be measured and described in a more consistent way supported by proper statistical instruments developed, based on international tools and enhanced through international cooperation.

To meet the above challenges, in 2007, the International Labour Organization (ILO) and the World Tourism Organization (UNWTO) launched a set of joint statistical initiatives which had been geared towards enhancing the national capacity in measuring employment in the tourism industries and improving international comparability of employment-related tourism statistics. These joint efforts culminated in the approval by the ILO Governing Body at its 301st Session (March 2008) of the Agreement on cooperation between the ILO and the UNWTO<sup>13</sup> with further ratification by the General Assembly of the UNWTO.

<sup>11</sup> https://www.statista.com/topics/962/global-tourism/

<sup>&</sup>lt;sup>12</sup> United Nations. International Recommendations for Tourism Statistics 2008 Compilation Guide, Chapter 7. Measuring employment in the tourism industries; available sat: https://unstats.un.org/unsd/tradeserv/tourism/E-IRTS-Comp-Guide%202008%20For%20Web.pdf

<sup>13</sup> International Labour Office, Agreement between the International Labour Organization and the World Tourism Organization. Committee on Legal Issues and International Labour Standards. 301st Session of the Governing Body. Fourth Item on the Agenda: Other legal issues. GB.301/LILS/4. Geneva, March 2008; http://www.ilo.org/wcmsp5/groups/public/---dgreports/---jur/documents/genericdocument/wcms\_434582.pdf

It was expected that closer collaboration and liaison between the two organisations should improve the situation, where the lack of reliable statistics on quantitative and qualitative aspects of employment in the tourism industries caused a major problem in providing the National Tourism Administrations, the Ministries of Labour and the Ministries of Finance with relevant statistical indicators to monitor and analyse developments in the tourism-related labour market as well as measure various dimensions and deficits of decent work in the tourism sector.

On 18 September 2009, to further enhance the importance of human resource development, foster employment and support tourism sustainability, the ILO and the UNWTO made a joint statement based on the above cooperation agreement. The statement addressed to the national leaders and world community at large, highlighted the following multi-dimensional merits of tourism:

- Tourism is one of the world's top job creators
- Tourism is a lead export sector
- Tourism is an important agent for development.
- Tourism can help the transition to a Green Economy

In particular, one of the statements reads: "Employment in the tourism industry should include not only job creation but decent and productive work in sustainable enterprises through national and local tourism development strategies, new tourism products and services, with a high labour content, a high labour multiplying impact and a high level of sustainability".<sup>14</sup>

#### 1.1.1. Major outputs produced within the framework of the joint agreement

In line with the agreement, the following outputs have been produced as a result of the inter-agency collaboration:

- i. Joint publication Sources and Methods in Labour Statistics Employment in the Tourism industries (Special Edition).
- ii. New Chapter 7 "Employment in the tourism industries" in the revised *International Recommendations for Tourism Statistics* 2008 (IRTS 2008).
- iii. Measuring employment in the tourism industries beyond a Tourism Satellite Account: A case study of Indonesia (with examples illustrating the use of data from different sources with the objective to analyse both the coverage and quality of labour force employed in the tourism industries, including a proposed core set of decent work statistical indicators for measuring various dimensions of decent work in the tourism industries).
- iv. Chapter 7 of the International Recommendations for Tourism Statistics 2008 Compilation Guide.
- v. Measuring employment in the tourism industries: Guide with best practices.

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<sup>&</sup>lt;sup>14</sup> ILO/UNWTO Statement on Tourism and Employment; available at: http://www.ilo.org/wcmsp5/groups/public/---ed\_dialogue/---sector/documents/statement/wcms\_162290.pdf

# 1.1.2. Joint publication Sources and Methods in Labour Statistics - Employment in the Tourism industries (Special Edition)<sup>15</sup>

This was a pioneering publication conceived to provide users and producers of tourism statistics, and those interested in labour statistics in general, with a consolidated volume on the measurement of employment in the tourism sector. It contains information on methodology, as well as descriptions of employment, wages and hours of work in the tourism industries. The definitions refer to all major statistical sources, as well as methods used by countries to compute these variables.

The information was collected through a specially developed set of questionnaires sent to the National Statistical Offices and the National Tourism Administrations in more than 200 countries and territories. Each questionnaire corresponded to a different type of statistical source.

In total, responses were received from over 100 countries and territories, of which 81 sent their returns with questionnaires completed.<sup>16</sup>

# 1.1.3. Chapter 7 "Employment in the tourism industries" of the revised International Recommendations for Tourism Statistics 2008 (IRTS 2008)<sup>17</sup>

The Recommendations on Tourism Statistics, adopted by the United Nations Statistical Commission in 1993<sup>18</sup> and published in 1994 did not have any mention of employment. In that sense, the UNWTO Workshop on Tourism Statistics (Madrid, 17-20 July 2006) became a pivotal and landmark event, where the ILO representative made a strong plea for the inclusion of employment statistics in the revised version of the International Recommendations on Tourism Statistics. That request was welcomed by the UNWTO and the UNSD, and supported by the Workshop's participants, including the representatives of EUROSTAT and the OECD. The initiative became part of the Agreement on cooperation between the ILO and the UNWTO.

The ILO drafted Chapter 7 for a world-wide discussion and approval. It describes concepts and definitions of employment in tourism industries and its basic categories, major classifications and measures.

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<sup>&</sup>lt;sup>15</sup> ILO/UNWTO. Sources and Methods in Labour Statistics - Employment in the Tourism industries (Special Edition). Geneva 2008; available at: http://www2.unwto.org/publication/sources-and-methods-labour-statistics-employment-tourism-industries-special-edition

<sup>&</sup>lt;sup>16</sup> Taking into consideration the nature, scope and the level of detail requested as well as the fact that many countries did not respond simply because they had nothing to report, the response rate was satisfactory.

<sup>&</sup>lt;sup>17</sup> United Nations and UNWTO. Department of Economic and Social Affairs. *International Recommendations for Tourism Statistics* 2008. Studies in Methods, Series M No. 83/Rev.1. New York 2010; available at: https://unstats.un.org/unsd/publication/Seriesm/SeriesM\_83rev1e.pdf

<sup>&</sup>lt;sup>18</sup> Recommendations on Tourism Statistics, Statistical Papers, Series M, No.83 United Nations Publication Sales No. E.94.XVII.6. New York 1994; available at: https://unstats.un.org/unsd/publication/Seriesm/SeriesM\_83e.pdf

# 1.1.4. Measuring employment in the tourism industries beyond a Tourism Satellite Account: A case study of Indonesia<sup>19</sup>

Indonesia has been constructing the national TSA since 2000. Additionally, the country constructs the TSA for six provinces, including Bali. Indonesia has also recently produced, jointly with the ILO, a series of useful and interesting publications on tourism employment, such as Implications of the Global Economic Crisis for Tourism Employment: Case Study for Indonesia.

Considering Indonesia's notable achievements in the development of national tourism statistics and the production of data on employment in the tourism industries within the TSA framework at different administrative levels, Indonesia was selected as a pilot country for the Joint ILO/UNWTO Project. The objective of the case study was to carry out an in-depth study on possible ways of applying the latest international recommendations in the field of tourism statistics to produce new sets of data on employment in the tourism industries beyond the TSA.

The idea was, therefore, to move from the TSA approach, based on the economic or pecuniary side of employment, to its human or individual significance, i.e. to collect data not only on the number of jobs but also on the number of persons employed in tourism-characteristic jobs as well as on the working conditions of persons engaged in tourism-characteristic activities including their hours of work (rather than or in addition to the full-time equivalent jobs), their wages and salaries, their occupation and education, whether they are engaged in paid or self-employment, etc.

Another objective of the study was to present the scope of Indonesia's Decent Work Indicators and suggest which of these could be produced to measure progress on decent work in the tourism industries.

The findings, conclusions and recommendations of the study were presented and discussed at the National Workshop "Measurement of employment and decent work in the tourism industries in Indonesia" (Jakarta, 24-25 May 2011).

#### 1.1.5. Compilation guide for IRTS 2008, Chapter 7<sup>20</sup>

As a continuation of joint collaboration within the framework of the inter-agency agreement and a logical follow-up to the preparation of IRST 2008 Chapter 7, the ILO and the UNWTO supported the preparation of Chapter 7 "Measuring employment in the tourism industries" of the Compilation Guide. After a global discussion, the chapter was incorporated in the guide. It is a companion publication to the *International Recommendations for Tourism Statistics 2008 (IRTS 2008)* whose primary purpose is to provide further clarification and practical guidance on utilising the sources and methods needed to compile statistics on tourism. The Guide is designed to support the production of a high-quality set of basic data and indicators in each country, and to strengthen the international comparability of tourism statistics.

<sup>&</sup>lt;sup>19</sup> International Labour Office. *Measuring employment in the tourism industries beyond a Tourism Satellite Account: A case study of Indonesia*. Jakarta: ILO 2011; available at:

http://www.ilo.org/wcmsp5/groups/public/@asia/@ro-bangkok/@ilo-jakarta/documents/publication/wcms\_163523.pdf

<sup>&</sup>lt;sup>20</sup> Unite Nations. Department of Economic and Social Affairs. *International Recommendations for Tourism Statistics* 2008 *Compilation Guide*. Studies in Methods, Series M No.94, New York 2016; available at: https://unstats.un.org/unsd/tradeserv/tourism/E-IRTS-Comp-Guide%202008%20For%20Web.pdf

# 1.1.6. Measuring employment in the tourism industries: Guide with best practices<sup>21</sup>

This is the latest technical output produced under the joint ILO/UNWTO Agreement and it completes a series of international references and methodological tools on tourism employment statistics.

The Guide is compiled with the objective to share the experiences of eight countries<sup>22</sup>, selected from the joint ILO/UNWTO publication *Sources and Methods in Labour Statistics – Employment in the Tourism industries (Special Edition)*, as those whose models exemplify best or interesting practices in measuring employment, wages, hours of work and other employment-related variables in the tourism industries

In addition to its technical value as an authoritative manual and reference book on the topical issues of tourism-related employment statistics and measures, the Guide complements the *International Recommendations for Tourism Statistics 2008* and its *Compilation Guide* as well as the *Tourism Satellite Account Recommended Methodological Framework 2008* as it improves their understanding and extends their application in the national systems of tourism statistics.

#### 1.2. UNWTO Seminar: Employment in tourism – realizing its full potential

In November 2013, the World Tourism Organization and "Escuela de Organización Industrial" (EOI) with support of Club Malaga Valley, organised a Joint Seminar on "Employment in Tourism – Realizing its Full Potential" (Malaga, Spain).

The seminar was organised as one of the key technical UNWTO meetings held since its Fifth International Conference on Tourism Statistics - Tourism: An Engine for Employment Creation (Bali, Indonesia, 30 March – 2 April 2009). The meeting involved more than 40 participants, including government officials from ministries, national tourism authorities and national statistical organisations of Austria, Brazil, Croatia, Ireland, Mozambique, New Zealand, Poland, the Philippines, Spain, Sultanate of Oman, Sweden, Switzerland and the United Kingdom. In addition, the Seminar was attended by representatives of the ILO and the OECD, as well as academia and research in the area of tourism development.

In his opening speech, Mr Taleb Rifai, UNWTO Secretary General, emphasised that being a service sector, tourism was not only one of the most labour intensive economic sectors, but also a fast entry point to the job market, particularly for women and youth given that tourism employment and entrepreneurship is likewise central to promoting gender equality. Further, Mr Rifai stressed that to be successful in promoting the value of tourism as a job creator, the users increasingly needed statistics on the jobs created by the sector at national and local level, as well as information on the indirect jobs generated through economic linkages, the characteristics of employment in tourism and the existing gaps. Notably, the Secretary General pointed out that there were still many open questions and issues to be further developed and clarified and, therefore, he considered the seminar being one of the building blocks in the process of consolidating the international recommendations on tourism statistics in terms of employment. In conclusion, Mr Rifai acknowledged the importance of cooperation between the UNWTO and the International Labour Organization (ILO) in the area of employment statistics and promotion of decent work in the tourism industries.

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<sup>&</sup>lt;sup>21</sup> UNWTO and ILO. *Measuring employment in the tourism industries: Guide with best practices*. Madrid 2014; available at: http://www2.unwto.org/publication/measuring-employment-tourism-industries-guide-best-practices

<sup>&</sup>lt;sup>22</sup> Austria, Brazil, Canada, Ireland, New Zealand, Spain, Switzerland and the United Kingdom.

On the basis of discussions, suggestions and recommendations made by the seminar participants, the UNWTO Secretariat prepared Recommendations of the Seminar (see attached as Annex I).

Two recommendations seem to be of particular interest in the light of the MST Working Group initiative covering, *inter alia*, some aspects of social statistics, employment and a green job dimension of sustainable tourism (see Box 1).

#### Box 1: Extract from the Recommendations prepared by the UNWTO Secretariat

#### 1. List of tourism characteristic occupations

The absence of the internationally agreed list of tourism characteristic occupations makes it difficult to both measure employment in tourism in general and quality of employment in tourism in particular. Given the fact that a number of countries, and notably Canada, have advanced with the development of a national classification of tourism characteristic occupations, it is recommended that the UNWTO takes the lead in developing such a list with technical support from the ILO and national experts. To organise such work, a thematic Expert or Working Group could be created under the auspices of the UNWTO.

#### 7. Quality of tourism employment

Currently, there is no uniform, internationally agreed concept of a quality job in the tourism sector. The OECD Tourism Committee (TC) is implementing a project entitled Supporting Quality Jobs in Tourism. This project examines approaches to supporting the quality of tourism jobs, with a particular focus on enhancing skills and career development opportunities for people employed in tourism SMEs. Based on the OECD questionnaire returns, a comprehensive report will be prepared on countries' concepts and practices of measuring tourism quality jobs. It is recommended that the UNWTO taps on the OECD work and organises a Seminar on Measuring Quality Employment in Tourism.

#### 1.3. Towards a Statistical Framework for Measuring Sustainable Tourism (MST)<sup>23</sup>

Sustainable tourism is increasingly relevant in national agendas and also recognised at the highest international level with the UN General Assembly having adopted several resolutions acknowledging the role of tourism in sustainable development, including the 2030 Agenda and its Sustainable Development Goals (SDGs).

The UNWTO's first initiatives to measure sustainable tourism go as far back as early 90's of the 20th century.

Thus, from historical perspective, in 1993, the World Tourism Organisation established a Task Force of international experts to define a set of indicators of sustainable tourism. Its 1995 report "What Tourism Managers need to know" recommended a list of indicators for use at national level and for application to specific tourist destinations. These indicators were tested through pilot projects at local destinations e.g. in Canada, Mexico, the Netherlands, Argentina and the United States, and the results were published as "A practical guide for the development and application of indicators of sustainable tourism" in 1996. 25

http://statistics.unwto.org/mst

http://statistics.unwto.org/committeestsa 17thmeeting

<sup>&</sup>lt;sup>23</sup> This Sub-section is largely adapted from a series of the UNWTO official materials distributed through its relevant Websites, such as: http://cf.cdn.unwto.org/sites/all/files/pdf/concept\_note\_philippines\_format.pdf http://cf.cdn.unwto.org/sites/all/files/pdf/item\_3.2\_1.pdf

<sup>&</sup>lt;sup>24</sup> World Tourism Organization. What Tourism Managers Need to Know: A Practical Guide to the Development and Use of Indicators of Sustainable Tourism. Madrid 1996.

<sup>&</sup>lt;sup>25</sup> World Tourism Organization. *A practical guide for the development and application of indicators of sustainable tourism*. Madrid 1996.

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However, despite the long-standing interest and discussion of sustainable tourism and the important advances in tourism statistics, there is as yet no standardised basis for the collection of relevant information, at either the national or subnational level. This is a significant gap, and one that limits the potential for the development of policies directed at advancing sustainable tourism.

In order to fill this statistical gap, UNWTO, with the support of the UN Statistics Division (UNSD), has initiated the project Towards a Statistical Framework for Measuring Sustainable Tourism.

The First Meeting of the Working Group of Experts on Measuring Sustainable Tourism (MST), held in October 2016, agreed that developing a statistical framework for measuring sustainable tourism (SF-MST) is a priority to support integrated policy responses at national and destination level, and urged UNWTO to lead this effort.

The participants of the Working Group also agreed that the core rationale for developing a statistical framework is to support the measurement of sustainable tourism in its various dimensions (economic, environmental and social) and at the relevant spatial levels (global, national, sub-national) by providing a common language and organising structure for exploiting the richness of data already available and for identifying additional data that may be needed.

A statistical framework for sustainable tourism is the natural evolution of and complement to the standing statistical standards on tourism statistics: the *Tourism Satellite Account* (TSA) and the *International Recommendations for Tourism Statistics* (IRTS). The starting foundation involves bridging the economic and environmental dimensions of sustainable tourism through two UN standards: the TSA and the *System of Environmental Economic Accounting* (SEEA)<sup>26</sup>.

Concordantly, the primary focus of the draft SF-MST was on the potential to combine the accounting frameworks of *Tourism Satellite Accounts* (TSA) and the *System of Environmental-Economic Accounting* (SEEA)<sup>27</sup>. During the workshop, a proposal was made to the MST Working Group to consider including green jobs as another dimension of sustainable tourism that could be measured with relevant indicators by possibly extending TSA Table 7.<sup>28</sup>

The rationale behind the above proposal was that green jobs could be created through the development and promotion of green products, green services and green public works. Green labels and certification programmes support these products and services, but they are still underdeveloped in many tourism destinations.

The understanding of and commitment for green jobs supporting an adequate transition for workers and employers towards a low carbon, climate change decelerating, environmentally friendly and socially respectful development should be a crucial part of sustainable tourism policies in any tourism oriented country. Green jobs therefore need to be integrated in all tourism related policies on employment and business as well as climate change mitigation with a view to their sustainability.

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<sup>&</sup>lt;sup>26</sup> UNWTO Press release; available at: http://statistics.unwto.org/mst

<sup>&</sup>lt;sup>27</sup> UNWTO Statistics and Tourism Satellite Account Programme. *Measuring Sustainable Tourism (MST): Developing a statistical framework for sustainable tourism.* Meeting of the Working Group of Experts on 20-21 October 2016. Discussion Paper #1 *Framing Sustainable Tourism*; available at: http://cf.cdn.unwto.org/sites/all/files/pdf/mst\_issue\_paper\_1.pdf

<sup>&</sup>lt;sup>28</sup> See: *Green Jobs for Sustainable Tourism*. Green Jobs and Sustainable Development International Centre (GJASD International), p. 11, Section 9. *Potential use of TSA for measuring green jobs in the tourism industries*; available at: http://cf.cdn.unwto.org/sites/all/files/pdf/gjasd\_international.pdf

Based on the recommendation of the MST Working Group Meeting, two major documents were developed and presented for discussion at the Seventeenth Meeting of the Committee on Statistics and the Tourism Satellite Account (24-25 January 2017):<sup>29</sup>

- (i) Proposed Outline for a Statistical Framework for Measuring Sustainable Tourism
- (ii) Proposed MST Research Programme.

## 1.3.1. Proposed Outline for a Statistical Framework for Measuring Sustainable Tourism

The Proposed Outline for a Statistical Framework for Measuring Sustainable Tourism consists of the following six chapters and Annexes:<sup>30</sup>

- Chapter 1: Introduction
- Chapter 2: Overview of the SF-MST
- Chapter 3: Defining spatial areas for the measurement of sustainable tourism
- Chapter 4: Accounting for the economic dimension of sustainable tourism
- Chapter 5: Accounting for the environmental dimension of sustainable tourism
- Chapter 6: Accounting for the social and cultural dimension of sustainable tourism
- Annexes

Chapter 4: Accounting for the economic dimension of sustainable tourism intends to cover the following accounts and provide relevant description of accounting entries, measurement boundaries, methodological issues and extensions:

- Description of accounts for tourism industries and production
  - Accounting for characteristics of tourism industries
    - Integrating measures of business demography including ownership, size, structure, location, management practices, etc.
  - Accounting for employment aspects
    - Demographics including location
    - Skills and training
    - Decent work
    - Green jobs
  - Accounts for tourism built-infrastructure

### 1.3.2. Proposed MST Research Programme<sup>31</sup>

In order to provide the ST-MST with a solid methodological basis, a research programme for the Measuring Sustainable Tourism project has been developed for discussion among the UNWTO Committee on Statistics and TSA at its January 2017 meeting. More specifically, the programme has

<sup>&</sup>lt;sup>29</sup> UNWTO Statistics and Tourism Satellite Account Programme. Measuring Sustainable Tourism (MST): Developing a statistical framework for sustainable tourism Meeting of the Working Group of Experts on 20-21 October 2016. Discussion Paper #1 *Framing Sustainable Tourism*; available at: <a href="http://statistics.unwto.org/committeestsa\_17thmeeting">http://statistics.unwto.org/committeestsa\_17thmeeting</a>

<sup>&</sup>lt;sup>30</sup> Committee on Statistics and the Tourism Satellite Account. Seventeenth meeting, UNWTO Headquarters, Madrid, Spain 24-25 January 2017. Statistical Framework for Measuring Sustainable Tourism: Draft outline; available at: <a href="http://cf.cdn.unwto.org/sites/all/files/pdf/item\_3.2\_1.pdf">http://cf.cdn.unwto.org/sites/all/files/pdf/item\_3.2\_1.pdf</a>

<sup>&</sup>lt;sup>31</sup> Committee on Statistics and the Tourism Satellite Account. Seventeenth meeting, UNWTO Headquarters, Madrid, Spain 24-25 January 2017. *Proposed MST Research Programme*; available at: http://cf.cdn.unwto.org/sites/all/files/pdf/item\_7.2\_mst\_research.pdf

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been developed in light of (i) the framing and discussion of MST at the MST Working Group meeting in October 2016 and (ii) with the aim of producing substantive drafts of a statistical framework for MST and an associated Technical Note 1 (*Framing Sustainable Tourism*)<sup>32</sup> focused on linking economic and environmental aspects of tourism through the first half of 2017.

The research tasks have been grouped into seven themes:

- 1 Environmental flows
- 2 Environmental assets and ecosystems
- 3 Tourism employment, green jobs and environmental activity
- 4 Tourism destinations
- 5 Sustainable tourism indicators
- 6 Cultural and social dimensions of sustainable tourism
- 7 Data sources and compilation methods

Theme 3: Tourism employment, green jobs and environmental activity is directly related to the issues covered in Chapter 3 of this paper. Task #7: Approaches to measuring tourism employment and green jobs for sustainable tourism has been included in the research programme with the objective to develop measures of green jobs from a tourism perspective. The task here is to develop a broad framing of employment as it relates to sustainable tourism.<sup>33</sup>

#### 1.4. ILO's Green Jobs Programme

On 24 September 2008, Mr Juan Somavia (at the time ILO Director-General), Mr Achim Steiner (at the time UNEP Executive Director), Mr Guy Ryder (at the time General Secretary of the International Trade Union Confederation and the current ILO Director-General) and Ms Ronnie Goldberg (Vice-President of the International Organisation of Employers), presented jointly the report entitled "Green Jobs: Towards decent work in a sustainable, low-carbon world" at a press conference in New York at the United Nations.<sup>34</sup>

Here is an extract from Mr Somavia's visionary statement made at the press-conference: "Moving towards a more sustainable development path will mean major changes in the production and consumption patterns of all countries. It's a global challenge that will happen in enterprises and work places all over the world. That's where the ILO comes in with its policy tools. That transition has already started. As we've heard, green jobs are here and now... I would just make three quick points. First, this is a worldwide issue relevant to all countries... Second, we need to make sure that green jobs are decent jobs... Third, new jobs will be created, others adapted, and some will fade out".35

The Report was the first ever comprehensive study of the impact on the world of work of climate change and related mitigation efforts. It reported on the negative effects that climate change was already having on workers, especially those whose livelihoods depended on agriculture and tourism; and it provided evidence for the first time at global level that green jobs were being generated in some sectors and economies. It went on to highlight the considerable potential for the creation of new jobs in green

<sup>32</sup> http://cf.cdn.unwto.org/sites/all/files/pdf/mst\_issue\_paper\_1.pdf

<sup>33</sup> See page 4: http://cf.cdn.unwto.org/sites/all/files/pdf/mst\_issue\_paper\_1.pdf

<sup>34</sup> http://www.ilo.org/global/about-the-ilo/newsroom/statements-and-speeches/WCMS\_098519/lang--en/index.htm

<sup>&</sup>lt;sup>35</sup> Statement of ILO Director-General Juan Somavia - *Green Jobs: Towards Decent Work in a Sustainable, Low-carbon World*; available at: http://www.ilo.org/global/about-the-ilo/newsroom/statements-and-speeches/WCMS\_098519/lang-en/index.htm

products and services, as well as the importance of the greening of existing workplaces and of providing support for those whose livelihoods would be affected by the impact of adjusting to a low-carbon global economy.

The joint UNEP/ILO/IOE/ITUC report defined "a green job" as any decent job that contributes to preserving or restoring the quality of the environment, be it in agriculture, industry, services or administration. In practice these jobs: (i) reduce consumption of energy and raw materials; (ii) limit greenhouse gas emissions; (iii) minimize waste and pollution; (iv) protect and restore ecosystems; and (v) enable enterprises and communities to adapt to climate change<sup>36</sup>.

In 2009, the ILO initiated the Green Jobs Global Programme to promote opportunity, equity and a just transition to a low-carbon, climate resilient and environmentally friendly economy. The programme encourages governments, employers and workers to collaborate on generating coherent policies and effective programmes that will support a green economy with green jobs and decent work for all.

In the broader definition currently used by the *Green Jobs Programme of the ILO*: "Jobs are green when they help reduce negative environmental impact ultimately leading to environmentally, economically and socially sustainable enterprises and economies. More precisely *green jobs are decent jobs* that: reduce consumption of energy and raw materials; limit greenhouse gas emissions; minimize waste and pollution; and protect and restore ecosystems" 37.

Given the above, it is possible to say that a green job is any job or self-employment that genuinely contributes to a more sustainable world.

The Green Jobs Programme has progressively assisted over 30 countries by building relevant ILO expertise and tools in dedicated areas of work.

The Programme's services include:

- Knowledge creation by documenting experiences, conducting global, regional and sectoral studies, and producing flagship reports and guidelines on the linkages between labour and environmental issues.
- Advocacy by building partnerships.
- Capacity building by providing stakeholders with opportunities to learn about key green jobs concepts, suitable approaches, existing tools and best practices.
- Diagnostics and prioritization by identifying economic sectors with high potential for green job creation through national green jobs assessments.
- Policy advice for the formulation and implementation of effective national or sectoral policies that create green jobs, foster social inclusion and improve sustainability;
- Knowledge sharing so that others can learn from best practices and country experiences.

In a nutshell, the Programme's holistic approach is the following:38

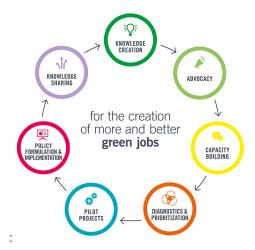
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ILO. Sustainable development, decent work and green jobs. Report V. International Labour Conference. 102nd Session,
 2013. Geneva 2013. Available at:

http://www.ilo.org/wcmsp5/groups/public/@ed\_norm/@relconf/documents/meetingdocument/wcms\_207370.pdf

<sup>&</sup>lt;sup>37</sup> See: *The Green Jobs Programme of the ILO*. Available at: http://www.ilo.org/wcmsp5/groups/public/---ed\_emp/---emp\_ent/documents/publication/wcms\_371396.pdf

<sup>&</sup>lt;sup>38</sup> ILO's Green Jobs Programme; available at : http://www.ilo.org/global/topics/green-jobs/WCMS\_213842/lang--de/index.htm



In his Report entitled "Work in a changing climate: The Green Initiative" addressed to the 106th Session of the International Labour Conference (5-16 June 2017), Guy Ryder, ILO Director-General, pointed out that "transition to climate-resilient economies and societies will provide huge incentives and opportunities for technology development and innovation. It is clear that providing energy, water, food, shelter and mobility to the 9 billion inhabitants of the world in 2050, and meeting the demands of the anticipated 3 billion additional middle-class consumers, will not be possible through an incremental or linear approach to doing business. Such challenges are compounded by an increasingly mobile workforce both within and between national boundaries. Profound transformations of systems of both production and of consumption seem needed and inevitable and they will bring important jobs consequences".<sup>39</sup>

He further emphasised: "Tourism is another sector which is often vulnerable to the effects of climate change and where adaptation strategies take on a diversity of forms. They range from cyclone proof building design to early warning systems and product and market diversification depending on country contexts, and have contributed to the healthy growth of non-traditional and small-scale tourism as an alternative to the large-scale mainstream variety. This is reflected in the rise of ecotourism, agrotourism, adventure, cultural, and medical and wellness tourism, which offer positive perspectives for new sources of job creation".<sup>40</sup>

The ILO participated in the Seventeenth meeting of the UNWTO Committee on Statistics and the Tourism Satellite Account, held in January 2017, and supported the *Outline for a Statistical Framework for Measuring Sustainable Tourism* and the *Proposed Research Programme*.

Given that the green jobs dimension has been included in the SF-MST, the ILO has offered to make contribution to the discussion on concepts, definitions and an approach to measuring green jobs in the tourism industries within the framework of the Sixth UNWTO International Conference on Tourism Statistics - Measuring Sustainable Tourism. The ILO's approach is presented in Chapter 3 of this paper.

<sup>&</sup>lt;sup>39</sup> International Labour Office. Report of the Director-General Report I "*Work in a changing climate: The Green Initiative*". 106th Session, International Labour Conference (Geneva, 5-16 June 2017), pp. 8-9; available at: <a href="http://www.ilo.org/wcmsp5/groups/public/---ed\_norm/---relconf/documents/meetingdocument/wcms\_554315.pdf">http://www.ilo.org/wcmsp5/groups/public/---ed\_norm/---relconf/documents/meetingdocument/wcms\_554315.pdf</a>

<sup>40</sup> International Labour Office. Report of the Director-General Report I "Work in a changing climate: The Green Initiative". 106th Session, International Labour Conference (Geneva, 5-16 June 2017), pp. 8-9; available at: http://www.ilo.org/wcmsp5/groups/public/---ed\_norm/---relconf/documents/meetingdocument/wcms\_554315.pdf

### 2. Sustainable Tourism: A Driving Force for Job Creation and Development

#### 2.1. Sustainable tourism as a driver for job creation and development<sup>41</sup>

In 2012 in Mexico, the G20 Leaders recognised tourism as "a vehicle for job creation, economic growth and development" and committed to support policies that promote decent work in tourism, entrepreneurship, gender equality and youth employment. Reinforcing this statement, the T.20 Minsters Meeting in 2015 in Turkey convened to promote sustainable development in tourism, by developing more and better job opportunities and including tourism in the Employment Generation Agenda.

Finally, at the 2016 G20 Tourism Ministers Meeting, G20 leaders underlined that "tourism is one of the main sectors driving economic globalization, interconnection and integration and socio-economic development" and that it is a "driving force for social inclusion with a particular potential to advance employment and economically empower groups which are more vulnerable to social and economic risks, including, but not limited to, women, young people, migrants, indigenous and tribal peoples and rural residents".<sup>42</sup>

Within G20 countries, China, India, Indonesia, Mexico and South Africa are expected to be among the fastest growing tourism and travel destinations. Among the non-G20 economies Kyrgyzstan, Myanmar, Tanzania, Vietnam and Zambia are expected to show the strongest growth.

These statistics, highlighting the significant contribution of tourism to employment and GDP, speak for themselves. Furthermore, it is essential to make sure that the growth and development of this sector is sustainable, socially responsible and creates decent work opportunities.

Tourism is a major contributor to employment creation particularly for women, youth, migrant workers, rural communities and indigenous peoples and has numerous linkages with other sectors. As a consequence, tourism can lead to the reduction of poverty and to the promotion of socio-economic development and decent work. However, if tourism does not respect local cultures and is uncontrolled, unsustainable or not socially accountable, it can also have a negative impact on local communities, their heritage and environment, exacerbating inequalities.

When pursued in an environmentally sustainable manner, tourism ensures that local natural resources are not exploited and provides for long-term economic activities in local and neighbouring communities. Tourism enterprises are an important source of innovation and economic diversification and contribute to shaping development of destination countries, particularly through domestic purchases of goods, services inputs and investment flows. The sector can indirectly benefit the economy through government spending on infrastructure. Tourism thus holds the potential to improve living conditions, promote social inclusion and reduce poverty. It is therefore, indispensable to adopt coherent and inclusive tourism policies and programmes that would emphasise the important role that local communities and local governments as well as social partners play in the development of sustainable tourism policies having a positive impact on communities' lives and natural resources.

<sup>&</sup>lt;sup>41</sup> Partially adapted from Sustainable tourism: A driving force of job creation, economic growth and development; available at: http://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS 480824/lang--en/index.htm

<sup>&</sup>lt;sup>42</sup> 7th G20 Tourism Ministers Meeting Beijing, China, 20 May 2016. Declaration "Sustainable Tourism – An Effective Tool for Inclusive Development; available at: <a href="http://www.mofa.go.jp/mofaj/files/000205641.pdf">http://www.mofa.go.jp/mofaj/files/000205641.pdf</a>

Notably, today's customers are increasingly interested in products and services respecting local cultures and protecting the environment and biodiversity. The development of non-traditional tourism and small-scale tourism as opposed to large-scale mainstream tourism is on the rise. This includes adventure tourism, cultural tourism, ecotourism, agro-tourism, medical and wellness tourism, technology driven and on-demand accommodation platforms, low-cost services in transport, online booking and multigenerational travel. In short, more and more people worldwide support sustainable tourism.

While to date, there is no established, statistically based indicator of sustainable tourism that would validate identification of sustainable tourism industries, there is a well-established policy concept of sustainable tourism that has been developed under the auspices of the UNWTO. According to the UNWTO conceptual definition, sustainable tourism is one that establishes a suitable balance between the environmental, economic and socio-cultural aspects of tourism development and plays an important role in conserving biodiversity. It attempts to minimise its impact on the environment and local culture so that it will be available for future generations, while contributing to generate income, employment, and the conservation of local ecosystems.

By doing so, sustainable tourism maximises the positive contribution of tourism to biodiversity conservation and thus to poverty reduction and the achievement of common goals towards sustainable development.

Sustainable tourism provides crucial economic incentives for habitat protection. Revenues from visitor spending are often channelled back into nature conservation or capacity building programmes for local communities to manage protected areas.

Furthermore, tourism can be a key vehicle in raising awareness and fostering positive behaviour change for biodiversity conservation among the millions of people travelling the globe every year.<sup>43</sup>

Expressed simply, sustainable tourism can be defined as:

"Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities."44

#### 2.2. ILO guidelines on decent work and socially responsible tourism<sup>45</sup>

During recent decades, governments, ILO social partners (workers' and employers' organizations), and other tourism stakeholders have shown a growing interest and multiplied efforts to contribute to a thriving and sustainable tourism sector. More specifically, these efforts were aimed at facilitating the creation of an enabling business environment that attracts investment, and supports enterprise development; at improving working conditions and labour protection; and at establishing clear roles of tourism stakeholders such as government regulators, chambers of commerce, training institutes, or tourism management organisations.

<sup>43</sup> https://www.gdrc.org/uem/eco-tour/sustour-define.html

<sup>&</sup>lt;sup>44</sup> UNEP and UNWTO. *Making Tourism More Sustainable: A Guide for Policy Makers*, 2005, pp. 10-12; available at: http://www.unep.fr/shared/publications/pdf/DTIx0592xPA-TourismPolicyEN.pdf

<sup>&</sup>lt;sup>45</sup> Adapted from: International Labour Organization. *ILO guidelines on decent work and socially responsible tourism*; available at:

http://www.ilo.org/wcmsp5/groups/public/---ed\_dialogue/---sector/documents/normativeinstrument/wcms\_546337.pdf

In February 2017, the ILO convened the Meeting of Experts with the objective to review and adopt guidelines on decent work and socially responsible tourism in order to encourage the hotels, catering, tourism sector, its stakeholders and social partners to foster social responsibility and strengthen decent work, in line with the Sustainable Development Goals and the 2030 Agenda.<sup>46</sup>

The *ILO Guidelines on Decent Work and Socially Responsible Tourism* were adopted on 24 February 2017. The guidelines set out common principles and the policy framework that should guide action to achieve decent work and socially responsible tourism, and full and productive employment in the tourism industry, thereby promoting its sustainability, and contributing to the achievement of the SDGs.

For the purpose of these guidelines, the term "sustainable tourism" embraces "socially responsible tourism". It should generate local prosperity, decent work, promote environmental awareness, conserve and protect the environment, respect wildlife, flora, biodiversity, ecosystems and cultural diversity, and improve the welfare and livelihoods of local communities by supporting their local economies and the human and natural environment as a whole;<sup>47</sup> ensure viability and competitiveness of destinations and enterprises to enable them to prosper and deliver benefits in the long term. Social justice, decent work, gender equality, economic development, and environmental integrity are at the heart of sustainable tourism.

The salient features of the guidelines are presented below.

Sustainable tourism represents an important driver of inclusive economic growth and decent job creation, that can have a positive impact on income generation and education, and thus on the fight against poverty and hunger. It can contribute directly to achieving the internationally agreed SDGs.

The inclusion of tourism in the SDGs 8, 12 and 14 highlights the industry's potential to contribute to job creation, economic and social development (for more information on tourism-related SDGs, see Subsection 2.3 of this paper).

Governments should design, promote and implement holistic sustainable tourism development policies and strategies, from the national to the local level, in partnership with social partners, public and private sector stakeholders, including host communities of the tourism destination.

These policies and strategies need to be based on a sound economic and environmental foundation and have the promotion of full and productive employment and decent work as their core element. At the same time, they should seek to maximize the benefits of tourism to host communities, while minimizing its negative impacts. Sustainable tourism can be an important tool to support environmental protection and/or conservation and the sustainable use of biodiversity.

Aims of sustainable tourism policies, strategies and programmes

(a) Contributing to the promotion of full and productive employment and decent work for all by, inter alia, encouraging the industry and its supply chains to source locally; promoting local

<sup>&</sup>lt;sup>46</sup> International Labour Organization. Meeting of Experts to adopt Guidelines on Decent Work and Socially Responsible Tourism (Geneva, 20-24 February 2017); available at:

http://www.ilo.org/sector/activities/sectoral-meetings/WCMS\_508519/lang--en/index.htm

<sup>&</sup>lt;sup>47</sup> United Nations. *The Future We Want, Outcome document of the United Nations Conference on Sustainable Development,* annex to the resolution No. 66/288 adopted by the United Nations General Assembly, New York 2012.

- ownership; supporting the creation of local and rural jobs; addressing existing decent work deficits within the sector, with particular attention to people and groups vulnerable to discrimination.
- (b) Contributing to the achievement of the SDGs, in particular targets 8.9, 12.b and 14.7, including through the promotion of the fundamental principles and rights at work, occupational safety and health (OSH) and other international labour standards relevant to tourism.
- (c) Promoting the preservation of the destination's social and natural environment (for example, when developing mega projects such as sports events) and preserve tourism assets, including a destination's cultural heritage, ecosystem, natural resources in order to strengthen the national, environmental and economic resilience to economic and environmental vulnerabilities and shocks that otherwise lead to insecurity and social unrest.
- (d) Promoting sustainable tourism enterprises: strengthening the links between tourism and trade policies to enhance the access of MSMEs<sup>48</sup> to local, regional and international markets.
- (e) Promoting decent jobs for youth in the tourism sector.
- (f) Improving or establishing the collection of labour market statistics related to tourism disaggregated by age, sex, occupation and employment status, and urban–rural divide, including for planning future skill needs.
- (g) Including innovative mechanisms for monitoring and evaluation of tourism policies that assess progress on the promotion of full and productive employment and decent work.
- (h) In accordance with the conclusions agreed at the Global Dialogue Forum on New Developments and Challenges in the Hospitality and Tourism Sector organized by the ILO in 2010, there is a need for governments to ensure that the legal framework and their enforcement mechanisms promote adherence to decent work standards throughout the sector, and that all formats of accommodation are treated equitably as regards compliance with applicable labour, safety, commercial and taxation law and regulations.

Tourism sector-relevant measures for the design and implementation of sustainable tourism policies

Facilitating the transition to formality: the tourism sector, partly due to its seasonality and temporality combined with weak regulation, enforcement and organization of labour, in many countries crosses the fluid boundaries between the formal and informal economies and is characterized by a high informality. Migrant workers, women and youth are particularly vulnerable to endure informal or casual employment services in a less safe and less favourable working environment than other workers.

Non-standard forms of employment (NSFE): the NSFE, including temporary work, part-time work, temporary agency work and other multiparty employment arrangements, ambiguous employment relationships and dependent self-employment, are common in the tourism industry where diversity, fragmentation and seasonality are distinct features. A Decent Work Agenda should address the impacts of outsourcing and subcontracting on workers' rights to organize and bargain collectively.

Investing in the human resource development of the tourism workforce: strategic approach to human resource development (HRD) is essential to create an attractive, productive and sustainable tourism sector. Effective training and career development strategies can positively impact the sector's productivity as well as worker satisfaction and retention. Well-trained workers with career perspectives can be a driver of quality and innovation and a source of competitive advantage for tourism destinations.

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<sup>&</sup>lt;sup>48</sup> MSMEs: micro-, small and medium enterprises.

Implementing international labour standards and enforcing compliance with laws and regulations.

Promoting equality and non-discrimination: despite the general acceptance of the principle of equality and non-discrimination, and equal remuneration for women and men for work of equal value, tourism workers or those seeking work in the sector, particularly people and groups vulnerable to discrimination are not always effectively protected under the relevant national legislation. Further, due to organizational and structural characteristics of the sector, workers with family responsibilities, both women and men, face particular challenges in reconciling work with family and care responsibilities.

Eliminating forced and child labour: promoting effective collaboration between relevant ministries, government departments and social partners. Coordination with immigration authorities is important considering that migrant workers are particularly vulnerable to falling victim to forced economic exploitation. Establishing integrated case management systems to deal with child labour.

Ensuring freedom of association and the right to collective bargaining: the rights to organise and to bargain collectively, in accordance with the Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87), and the Right to Organise and Collective Bargaining Convention, 1949 (No. 98), are both human and enabling rights that make it possible to promote democracy, sound labour market governance and decent conditions and secure incomes at work.

Strengthening labour protection: social security; maternity protection; working conditions (working time, wages, occupational safety and health).

Promoting effective social dialogue: social dialogue and tripartism is the key feature of the ILO's governance paradigm and an important tool for promoting fair and peaceful workplace relations, decent work and social justice. Social dialogue offers numerous benefits, in particular it can help to minimize social conflict by facilitating consensus between the parties concerned on the design and implementation of economic and social policies. By contrast, lack of social dialogue leads to conflict, misunderstanding and fragmented progress.

The *ILO guidelines on decent work and socially responsible tourism* are of direct relevance to the ILO's and UNWTO's activities supporting member States in their commitment to SDGs.

# 2.3. SDGs: a matrix for convergence of employment, development, decent work and sustainable tourism

The SDGs were launched in September 2015 by the UN General Assembly - governments, businesses and civil society together with the United Nations have started to mobilise efforts to achieve the Sustainable Development Agenda by 2030. Universal, inclusive and indivisible, the Agenda calls for a universal action by all countries to improve the lives of people everywhere.

The 2030 Development Agenda defines a set of 17 goals grounded in 169 targets that carry an ambitious agenda for eliminating deeply rooted global inequities and inequalities, including the end of poverty. Additionally, growing concerns about the deepening planetary ecological crisis, especially in its climate change articulation, brought the power brokers to the point of needing to include sustainability within the development agenda. To use "The Matrix" metaphor, all of this work happened without a

<sup>&</sup>lt;sup>49</sup>1999 Fantasy/Science fiction film; http://www.imdb.com/title/tt0133093/mediaviewer/rm525547776

"glitch to the system" as it rebooted. Hardly anyone took notice, scarce was the debate, and few have asked questions about the fundamental premises of what is now called "sustainable development." The 2030 Agenda embraces the three dimensions of sustainability – economic, social and environmental.

Indeed, if we look at the 17 goals grouped together, they resemble a matrix of overlapping, cross-cutting, interrelated and juxtaposed dimensions:



Sustainable tourism is firmly positioned in the 2030 Agenda.

On 11 May 2016, participants of the 103rd session of the UN World Tourism Organization addressed the relationship between tourism and sustainability, new technologies, security, and travel facilitation. Opening the session and underscoring tourism's contribution to the economic, environmental and social dimensions of sustainability, Mr Taleb Rifai, UNWTO Secretary-General, said: "Tourism can be a powerful vehicle for promoting and reaching development milestones". <sup>51</sup>

The potential of the tourism industry to contribute to economic and social development has been recognised in a number of Sustainable Development Goals: Goal 8 (Promote inclusive and sustainable economic growth, employment and decent work for all); and Goal 14 (Conserve and sustainably use the oceans, seas and marine resources) also include targets relating to tourism.

The objectives of the above Goals and their relationship with the tourism sector are unfolded below.

"Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all".

Tourism is one of the driving forces of global economic growth. By giving access to decent work opportunities in the tourism sector, society - particularly youth and women - can benefit from enhanced skills and professional development. The sector's contribution to job creation is recognised in target 8.9 "By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products".

<sup>&</sup>lt;sup>50</sup> UN Sustainable Development Goals: The Matrix Reloaded; available at: http://www.telesurtv.net/english/opinion/UN-Sustainable-Development-Goals-The-Matrix-Reloaded-20151002-0012.html

<sup>&</sup>lt;sup>51</sup> UNWTO Highlights Tourism's Contributions to SDGs 8, 12, 14; available at: http://sdg.iisd.org/news/unwto-highlights-tourisms-contributions-to-sdgs-8-12-14/



#### "Ensure sustainable Consumption and Production patterns".

A tourism sector that adopts sustainable consumption and production practices can play a significant role in accelerating the global shift towards sustainability.

"Conserve and sustainably use the oceans, seas and marine resources for sustainable development".

Coastal and maritime tourism, tourism's biggest segments, particularly for Small Island Developing states' (SIDS), rely on healthy marine ecosystems. Tourism development must be a part of integrated Coastal Zone Management in order to help conserve and preserve fragile ecosystems and serve as a vehicle to promote the blue economy, in line with target 14.7: "By 2030 increase the economic benefits of SIDS and LCDs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism".

Importantly, in a broader perspective, tourism can contribute to each of the 17 goals.<sup>52</sup>

In the context of this paper, Goal 8 which aims to "promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" deserves special attention as it is directly linked with the ILO Decent Work Agenda. Many of the SDGs are connect to the ILO's mandate and the four pillars of the Decent Work Agenda (full and productive employment, rights at work, social protection and the promotion of social dialogue). 4

The ILO Framework on the Measurement of Decent Work covers the following ten substantive elements: employment opportunities; adequate earnings and productive work; decent working time; combining work, family and personal life; work that should be abolished; stability and security at work; equal opportunity and treatment in employment; safe work environment; social security; social dialogue.<sup>55</sup>

Stemming from the above, Decent Work is at the heart of the new global development paradigm and enshrined in at least 10 of the 17 SDGs. Moreover, like tourism, its 10 substantive elements listed above are found in all 17 goals.<sup>56</sup>

This similarity makes it possible to contemplate progress towards sustainable tourism and Decent Work as interrelated processes of two matrices, where achievement in a given dimension of matrix 1 (e.g., indicator 8.9.1: GDP in tourism) should yield a positive multiplication effect in the corresponding dimension of matrix 2 (e.g., 8.2.1: Annual growth rate of real GDP per employed person). Conversely, a failure in progress towards the above-mentioned established targets would result in deficit of decent work and the quality employment dimension of sustainable tourism.

<sup>&</sup>lt;sup>52</sup> For more details see: How Tourism can contribute to the Sustainable Development Goals (SDGs); available at: http://www.e-unwto.org/doi/pdf/10.18111/9789284417254

<sup>&</sup>lt;sup>53</sup> The concept of Decent Work has been defined by the ILO and endorsed by the international community as "Opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and human dignity", Report of the Director-General "Decent Work", 87<sup>th</sup> Session of the ILC, June 1999; available at: <a href="http://www.ilo.ch/public/english/standards/relm/ilc/ilc87/rep-i.htm">http://www.ilo.ch/public/english/standards/relm/ilc/ilc87/rep-i.htm</a>

<sup>&</sup>lt;sup>54</sup> see Annex II: ILO contributing to shaping the SDGs.

<sup>&</sup>lt;sup>55</sup> International Labour Organization. Decent Work Indicators - Guidelines for producers and users of statistical and legal framework indicators; available at: http://www.ilo.org/stat/Publications/WCMS 223121/lang--en/index.htm

<sup>&</sup>lt;sup>56</sup> International Labour Organization. *Decent work, the key to the 2030 agenda for sustainable development*; available at: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms 436923.pdf

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Given the above example, the benefits of a matrix approach to achieving SDGs and their targets in terms of enhanced inter-agency co-operation and improved decision-making, seem to be quite evident.

#### 2.3.1. Quality employment and decent work: two paradigms at the heart of SDGs

According to the UNWTO, quality employment is one of the key aims for sustainable tourism. More specifically, it is aimed to strengthen the number and quality of local jobs created and supported by tourism, including the level of pay, conditions of service and availability to all without discrimination by gender, race, disability or in other way.<sup>57</sup>

Notably, quality employment is encompassed in Pillar 3: *Employment, decent work and human capital* of the UNWTO framework for "assessing the approach to tourism ... and the extent to which it is being pursued effectively as a tool for sustainable development".<sup>58</sup>

The UNWTO further details that providing employment is one of the major ways in which tourism can contribute to the quality of life in host communities. However, in spite of the importance of human resources in tourism and the sector's contribution to the global economy, tourism jobs are often quite low paid, with poor conditions and little security of employment. This is partly due to the fragmentation of the sector which is characterised by seasonal, part-time and often family-based employment, but also to the view that service industry jobs are non-professional or casual work. There is a very high turnover of workers in some sectors of the industry. Improved conditions for workers can lead to better performance, increased staff retention, and greater efficiency and productivity.

High priority should be given to the creation of jobs that are stable, permanent and full-time, and that provide fair salaries and benefits. One of the main reasons why the tourism sector fails to deliver quality employment is the significant seasonal nature of demand in many destinations. This calls for clear policies to extend the season through measures such as: targeting markets most likely to travel in the off-season; discounted seasonal offers; organizing events at less busy times of the year; encouraging attractions to stay open longer; and seeking to influence the root causes of seasonality, such as the timing of the school year.<sup>59</sup>

The UNWTO Sustainable Tourism for Development Guidebook specifies that there are five main reasons why sound policies and action in the area of employment and human resources are critical to sustainable development through tourism<sup>60</sup>:

- The provision of accessible opportunities for employment, available to all, is central to economic development
- The availability of labour with sufficient aptitude and skills is a key requirement of successful tourism businesses
- The way that people who work in tourism perform their jobs and relate to visitors makes a huge difference to the quality of the visitor experience

<sup>57</sup> World Tourism Organization. *Sustainable Tourism for Development Guidebook*, Pillar 3: Employment, decent work and human capital, p. 81; available at: http://cf.cdn.unwto.org/sites/all/files/docpdf/devcoengfinal.pdf

<sup>&</sup>lt;sup>58</sup> World Tourism Organization. Sustainable Tourism for Development Guidebook, Pillar 3: Employment, decent work and human capital, p. 39; available at: http://cf.cdn.unwto.org/sites/all/files/docpdf/devcoengfinal.pdf

<sup>&</sup>lt;sup>59</sup> UNEP and UNWTO. *Making Tourism More Sustainable: A Guide for Policy Makers*, 2.3 Employment Quality, p. 30; available at: http://www.unep.fr/shared/publications/pdf/DTIx0592xPA-TourismPolicyEN.pdf

<sup>&</sup>lt;sup>60</sup> World Tourism Organization. *Sustainable Tourism for Development Guidebook*, Pillar 3: Employment, decent work and human capital, p. 81; available at: http://www.e-unwto.org/doi/pdf/10.18111/9789284415496

- Concern about working conditions and employee welfare must be seen as a fundamental principle of sustainable tourism in its own right.
- The availability of knowledge and skills in certain specific areas is important for the sustainability of tourism.

It can be seen immediately that these five reasons are closely interrelated.

To enhance the efficiency of using the recommendations included in the Guide, two sub-pillars are identified for assessment of sustainable tourism development:

#### i. Human resources<sup>61</sup> planning and working conditions

The development and implementation of policies, strategies and plans for the provision of employment, the management of human resources and the assurance of decent work, based on widespread consultation with all involved actors.

#### ii. Skills assessment and the provision of training

Understanding the needs of the tourism sector and employees for improved skills, including in topics related to the sustainability of tourism, and strengthening the availability and quality of training in the country in order to meet these needs.

The importance of human resources (HR) for the success and sustainability of tourism means that their planning should form an integral part of tourism policies and strategies for all countries. Specific HR plans should exist that set out and guide actions. Notably, HR plans should include three main components, considered below:

*Employment creation and management*. This addresses the supply and demand for jobs in the sector. HR plans should cover needs and opportunities, including:

- creating and increasing employment in the tourism sector in line with forecast market growth and the expected future development of tourism in the country
- retaining skilled workers within the sector and within the country
- ensuring flexibility in the labour market and managing labour migration to cope with seasonality and fluctuations in demand
- increasing opportunities for full time, year-round jobs
- encouraging recruitment by reducing non-wage costs such as employer contributions
- outlining policies, actions and incentives to encourage tourism firms to employ local residents as well as certain categories of workers such as women, minorities and disadvantaged groups (e.g. older workers, people with disabilities)
- promoting tourism and hospitality as a valid profession with recognised career paths and enhancing career progression and opportunities.

Human Resource Development (HRD). This covers the needs of employees in terms of skills and development in order to achieve their goals and those of the sector, and how these can be met through learning and training.

*Employee rights and decent work*. HR policies and plans should commit to these principles and address how they can be secured across the tourism sector. In other words, work that is decent should be productive and deliver:

a fair income

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<sup>&</sup>lt;sup>61</sup> Here the term *Human Resources* is used as being synonymous with the term Manpower when referring collectively to the provision of people working in the tourism sector or available to it.

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- workplace security and social protection for families
- better prospects for personal development and social integration
- freedom for people to express their concerns, organize and participate in decisions that affect their lives
- equality of opportunity and treatment for all women and men.

Recalling the four pillars pf Decent Work and its 10 substantive elements presented above, it is possible to say that the quality dimension of sustainable tourism largely overlaps with the Decent Work paradigm.

Conversely, the ILO supports the promotion of more sustainable and socially responsible tourism and decent work in the sector by<sup>62</sup>:

- Strengthening the sector's linkages with related sectors in its supply chain (e.g. agriculture, handicrafts, transports, infrastructure, construction,) while supporting and promoting an integrated approach and local sourcing.
- Reinforcing initiatives to promote employment creation at local level, including in rural areas, contributing to social and economic development and poverty reduction though social inclusion, regional integration and expansion of local incomes.
- Investing into skills development and vocational education and training, and improving working conditions to enhance the sector's image and service quality, bearing in mind that the skills level, professionalism, commitment, loyalty and soft skills of workers are key for competitiveness.
- Strengthening social dialogue mechanisms and collective bargaining. These can enhance
  working conditions, career prospects and job security to the benefit of the workers, and make it
  easier for companies to better respond to the needs and demands of the labour market.

Clearly, the two paradigms (Decent Work and Quality Employment) are not only interrelated but they complement each other within the SDGs matrix.

# 2.3.2. IRTS-2008: a framework for measuring quality employment and decent work in the tourism industries<sup>63</sup>

The IRTS 2008 provides a comprehensive methodological framework for collection and compilation of tourism statistics in all countries irrespective of level of development of their statistical systems. Its primary audience is the staff of national statistical offices and national tourism administrations involved in compilation of these statistics. The IRTS 2008 contains a wealth of information which might be of interest to data users who would like to understand better the nature of tourism data.

The IRTS 2008 conceptual framework of employment in the tourism industries, encompassed in its Chapter 7, refers to all the jobs (or persons engaged) in both tourism-characteristic activities and non-tourism-characteristic activities in all establishments in tourism industries. The Chapter describes

<sup>62</sup> International Labour Organization. *Sustainable tourism: A driving force of job creation, economic growth and development*; available at: http://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS\_480824/lang--en/index.htm

<sup>&</sup>lt;sup>63</sup> Adapted from United Nations and UNWTO. Department of Economic and Social Affairs. *International Recommendations for Tourism Statistics* 2008. Studies in Methods, Series M No. 83/Rev.1. New York 2010, para. 8.45; available at: <a href="https://unstats.un.org/unsd/publication/Seriesm/SeriesM\_83rev1e.pdf">https://unstats.un.org/unsd/publication/Seriesm/SeriesM\_83rev1e.pdf</a> and Unite Nations. Department of Economic and Social Affairs. *International Recommendations for Tourism Statistics* 2008 Compilation Guide. Studies in Methods, Series M No.94, New York 2016; available at:

https://unstats.un.org/unsd/tradeserv/tourism/E-IRTS-Comp-Guide%202008%20For%20Web.pdf

concepts, definitions, basic categories and indicators of employment in the tourism industries from a general statistical rather than a specific national accounts perspective.

According to paragraphs 7.27 and 7.28 of IRTS 2008, in order to adequately analyse employment in the tourism industries, it is recommended that countries collect the following key variables for each of the tourism industries and for the tourism industries as a whole:

- Employment by age group, sex and nationality/country of residence (if relevant);
- Employment by type of establishments (size, formal, informal, etc.);
- Employment classified by occupation and status in employment;
- Permanent/temporary employment expressed in terms of number of jobs, hours of work, fulltime equivalent, etc.;
- Employment by educational attainment;
- Hours of work (normal/usual, actually worked, paid for);
- Working time arrangements.

As employment variables are eventually used for an in-depth analysis of a country's tourism industries within a social and economic context, countries should also collect the following variables characterising the monetary aspect of labour:

- Compensation of employees that includes wages and salaries payable in cash or in kind, and the value of the social contributions payable by employers, for each industry and by categories of workers;
- Labour cost that besides remuneration for work performed also includes cost to the employer
  for vocational training, welfare services and miscellaneous items that are not necessarily
  included in compensation of employees, such as transport of workers, work clothes and
  recruitment, together with taxes regarded as labour costs;
- Mixed income of self-employed persons.

The international standard entitled *Tourism Satellite Account: Recommended Measurement Framework* 2008 (TSA:RMF 2008)<sup>64</sup> notes that the TSA purpose is to analyse in detail all the aspects of the demand for goods and services associated with the activity of visitors; to observe the operational interface with the supply of such goods and services within the economy; and describe how this supply interacts with other economic activities.<sup>65</sup>

The TSA Table 7 shows employment by the tourism industries cross-classified by number of jobs, full-time equivalents, hours worked broken down by sex and status in employment (employees and self-employed).

As follows from the comparison of the two international frameworks for measuring employment in the tourism industries and recalling the substantive elements of quality employment and decent work, it is clear that employment statistics collected using the IRST 2008 would provide the most comprehensive basis for measuring quality employment and decent work in the tourism industries.

Linking the materials presented in Section 2.3, it is possible to draw a conclusion that in order to achieve the established tourism-related targets of SDGs, a full potential of the SDGs matrix should be

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<sup>&</sup>lt;sup>64</sup> United Nations Department of Economic and Social Affairs, Statistics Division. Tourism Satellite Account: Recommended Methodological Framework 2008 (TSA:RMF 2008). Luxembourg, Madrid, New York, Paris, 2010; available at: <a href="http://unstats.un.org/unsd/publication/Seriesf/SeriesF\_80rev1e.pdf">http://unstats.un.org/unsd/publication/Seriesf/SeriesF\_80rev1e.pdf</a>

<sup>65</sup> Idem, p. ii.

used to provide for quality employment, management of human resources and assurance of decent work.

#### 3. Green Jobs Dimension of Sustainable Tourism

*Green jobs are decent jobs* that: reduce consumption of energy and raw materials; limit greenhouse gas emissions; minimize waste and pollution; and protect and restore ecosystems<sup>766</sup>

### 3.1. International efforts to define the green economy

In order to understand the nature of green jobs, it is important to understand the environment in which these jobs are being created. It is also true in the case of tourism industries where such jobs should be part of the green tourism economy.

Many national and international users are interested in the size of the green economy (in terms of the number of establishments, the number of employees and the total turnover) and in its contribution to economic growth, especially to turnover, employment (number of people employed directly or indirectly, their level of skills and the specialist skills required), value added, investment, exports, etc.

While internationally, there has been a great deal of debate about the promotion and measurement of the green economy, the meaning of the term is far from universally consistent. It is still a novel concept and refers to a mix of existing and emerging sectors, topics, principles and concepts. Many organisations have developed their own definitions. Information about the range of definitions related to the green economy, green growth and green jobs is provided in Annex II.

According to Jon Rynne, the economy is an ecosystem which consists of green or eco-industries.<sup>67</sup> He argues that green jobs will reinvigorate the economy, creating entirely new green-collar job sectors. EUROSTSAT and OECD define an eco-industry as: "activities which produce goods and services to measure, prevent, limit, minimize or correct environmental damage to water, air and soil, as well as problems concerning waste, noise and eco-systems. This includes technologies, products, and services that reduce environmental risks and minimise pollution and the use of resources"<sup>68</sup>.

Consequently and due to the following reasons, one may also argue that in order to determine the components of the green economy, an activity-based approach could be applied with a focus on products and services:

• It is in line with international literature and policy and therefore it builds further on the development of existing concepts, most notably by Eurostat and the OECD<sup>69</sup>.

http://www.ilo.org/wcmsp5/groups/public/---ed\_emp/---emp\_ent/documents/publication/wcms\_371396.pdf

<sup>&</sup>lt;sup>66</sup> See: Green Jobs Programme of the ILO; available at:

<sup>&</sup>lt;sup>67</sup> Rynn, Jon. The economy is an ecosystem; available at: http://grist.org/article/rebuild-the-economy-by-building-green-industries/

<sup>&</sup>lt;sup>68</sup> OECD/EUROSTAT. The Environmental Goods and Services Industry. Manual for Data Collection and Analysis, Paris, 1999; available at:

https://unstats.un.org/UNSD/envAccounting/ceea/archive/EPEA/EnvIndustry\_Manual\_for\_data\_collection.PDF

<sup>&</sup>lt;sup>69</sup> OECD/EUROSTAT. The Environmental Goods and Services Industry. Manual for Data Collection and Analysis, Paris, 1999; available at:

https://unstats.un.org/UNSD/envAccounting/ceea/archive/EPEA/EnvIndustry\_Manual\_for\_data\_collection.PDF

• It is a concept that is measurable since it is closely linked with the conceptual framework of Eurostat and the OECD. Their concepts were developed with measurement purposes in mind. Especially in comparison with the dynamic nature of "processes", the activity-based approach is easier to quantify, given the available economic data covering sectors and activities.

Further, it is proposed to use the term activities rather than sectors. Traditional sector and subsector classification is not always the most adequate for covering the "green economy". More and more, "green niches" are becoming apparent in traditional sectors, and many sectors have activities with different shades of green.

A conceptual framework of the green economy shown in Figure 1 is suggested as a basis for using green jobs as a measure of sustainable tourism.

The shades of green in this figure are based on the intended impact on the environment rather than the real impact.

**Core activities** have as a primary purpose the protection of the environment and include the clearest green activities. Examples of these activities are the recycling industry, the production of renewable energy, etc.

**Connected activities** can be seen as the "green" branch of traditional sectors like transport, construction, farming, tourism, etc. Market opportunities lead to green niches like the production of hybrid cars, recycled paper, green building, eco-tourism ... The protection of the environment is not the primary purpose of the sector as a whole but it is significant on a secondary basis. These activities can constitute a more environmentally friendly alternative for traditional products and services.

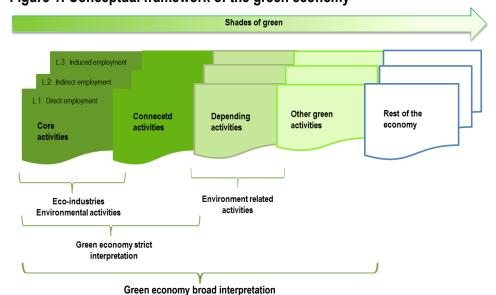


Figure 1: Conceptual framework of the green economy

Source: IDEA Consult based on literature review

Some activities are called **dependent activities** because they depend heavily on environmental quality. The activities do not have the explicit purpose of contributing to the protection of the environment. Agriculture, forestry and tourism are some clear examples.

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**Other activities** like public transport or ICT contribute to the environment but have in principle never had it as a major objective.

Particular attention requires the impact of green economy on employment: Level 1: direct; Level 2: indirect and Level 3: induced.

Table 1 below compares the main characteristics of the four types of green activities presented in the conceptual framework of the green economy.

Table 1: Characteristics of the different types of green activities

Туре	Purpose of protecting the environment	Examples
Core activities	Primary purpose	Environnemental protection: air pollution control, protection of biodiversity, waste management Resource management: water management, renewable energy, recycling
Connected activities	Secondary purpose	Hybrid cars, green building, green ICT, organic farming, sustainable tourism, sustainable forestry
Dependent Activities	No environmental purpose but dependent on environmental quality	Agriculture, commercial forestry, tourism
Other green activities	No environmental purpose	Public transport services, ICT

As follows from the table, tourism appears in relation with connected and depended activities.

#### 3.2. Green jobs: concept, definition and measurement framework<sup>70</sup>

Statistics on production and employment in the green sector of the economy (green jobs) have been strongly requested by policy departments and businesses to assist in (i) gaining a better understanding of the impact (both costs and benefits) of "greening the economy" and implementing green economy policies on the labour market, and (ii) ensuring that effective policy measures and tools are formulated to respond to this shift to a greener economy. Many national and international users, and ILO, in particular, have seen a growing demand for statistical data of green jobs that would enrich existing labour market information at the international and country level.

A number of national agencies in different countries have endeavoured to estimate the number of persons employed in green jobs, defined in a variety of ways and using a variety of methods of estimation. The earliest of these efforts involved the production of estimates of employment in environmental protection activities based on currently available data sources, with estimates tending to vary each year depending on the data available.

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<sup>&</sup>lt;sup>70</sup> Adapted from: International Labour Office. Proposals for the statistical definition and measurement of green jobs. Room Document: 5. 19th International Conference of Labour Statisticians Geneva, 2-11 October 2013; and Report III - Report of the Conference, Chapter 4: Green Jobs. 19th International Conference of Labour Statisticians, Geneva, 2 - 11 October 2013; available at: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms\_234124.pdf

One of the most comprehensive approaches has been adopted by the US Bureau of Labor Statistics (BLS), which defines green jobs as:

- (a) jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources (outputs), or
- (b) jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or use fewer natural resources (processes).

The use of these overlapping elements to define green jobs implies two different approaches to statistical measurement: an output approach and a process approach. The definition goes on to define precisely which goods, services or processes are to be considered.<sup>71</sup>

#### 3.2.1. 19th International Conference of Labour Statisticians

Given the growing demand for more and better statistics on a green economy and green jobs, the ILO Department of Statistics included draft proposals for a statistical definition of green jobs and the associated basic conceptual guidelines for collecting statistics and producing internationally harmonised statistical indicators in the agenda for discussion at the 19<sup>th</sup> ICLS (Geneva, 2-11 October 2013)<sup>72</sup>. The draft definition of green jobs and guideline for data collection were discussed at a special working session organised within the framework of the Conference.

After a comprehensive and critical discussion of the draft proposals prepared by the ILO, participants of the Conference generally agreed with the concept, definition and measurement framework and provided concrete modifications to the draft text. The exact decision of the 19th ICLS on this issue is quoted below:

"Chairperson in his closing remarks highlighted a common understanding that the Conference was not at this point invited to adopt a resolution but endorse the guidelines as work that needs to be pursued in view of promoting a common definition for statistical purposes. Simultaneously, countries should engage and pursue efforts in testing and building experiences at the national level in accounting for jobs in the environmental sector".<sup>73</sup>

The materials and discussions below are largely based on the documents of the 19th ICLS.

#### 3.2.2. Objectives and uses of statistics on green jobs

Statistics on green jobs is of interest to a wide variety of users: the general public, media and civil society, decision and policy makers concerned with economic growth, job creation, environmental protection, climate change and sustainability, as well as analysts, experts and advisors, academics, training institutions, government officials and international agencies.

<sup>&</sup>lt;sup>71</sup> Comprehensive information about the BLS approach to the measurement of green jobs can be found on the BLS website, http://www.bls.gov/green/

<sup>&</sup>lt;sup>72</sup> International Labour Office. Proposals for the statistical definition and measurement of green jobs. Room Document: 5. 19th International Conference of Labour Statisticians Geneva, 2-11 October 2013; and *Report I – General Report - Statistics on green jobs*.19th International Conference of Labour Statisticians Geneva, 2–11 October 2013, pp-48-51; available at: <a href="http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms\_218060.pdf">http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms\_218060.pdf</a>

<sup>&</sup>lt;sup>73</sup> Report III - Report of the Conference , Chapter 4: Green Jobs. 19th International Conference of Labour Statisticians, Geneva, 2 - 11 October 2013, para. 113; available at:

http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms\_234124.pdf

The statistics may also help establishments to supervise their own transition and to identify areas where improvements may be made. For these purposes "green jobs", which include a wide and heterogeneous set of jobs, may need to be analysed separately by type of greenness, because each type may reflect an underlying phenomenon that calls for different measures targeting different groups.

Another potential use of statistics on green jobs is the creation of labour market projections that take account of anticipated green growth and contraction in less sustainable activities. Such projections could help to minimize risk and uncertainty for providers of training and enable businesses and governments to plan and invest strategically in innovative areas. The resulting information would also be useful for evaluating policy initiatives and the labour market impact of activities related to the protection of the environment and the conservation of natural resources.

Distinguishing between different types of green jobs is important not only because of their diversity but also because of the different uses to which statistics on green jobs may be put. When the type of green job being analysed is related to the functioning of establishments (e.g., energy efficiency, recycling) the focus may be on particular types of technology and methods of production as well as on the specific skills required. By contrast, when the type of green job being analysed is related to the output of establishments (e.g., production of organic food) the most appropriate factors to be considered may be the characteristics of the outputs produced. Specific policy issues for which statistics on green jobs are required are listed in Annex III.

All these requirements imply the need not only for a general definition and measurement of total employment in green jobs but also for more detailed information on employment classified by type of environmental activity, type of environmental goods and services, occupation and economic activity (industry).

#### 3.2.3. Green jobs: operational definition

As documented in Sub-section 1.4, the ILO's Green Jobs Programme currently uses the following operational definition of "a green job": "Jobs are green when they help reduce negative environmental impact ultimately leading to environmentally, economically and socially sustainable enterprises and economies".

Here it may be useful to recall that the SEEA definition of environmental activities covers a similar range of activities to those covered in the *ILO Green Jobs Programme*, but it also offers specific guidance on the activities that are to be included or excluded. While the SEEA provides a central measurement framework for preparing integrated national accounts for the environment and defines the activities to be counted as environmental, it does not contain guidelines on the measurement of employment in those activities. The advantage of using the concepts described in the SEEA is that there is international agreement on the definitions and classifications to be used.

As follows from the country responses to the *OECD Green Jobs Questionnaire*, the following countries had their own national definitions of green jobs at the time of the survey: Austria, Finland, France, Germany, Hungary, Japan, Korea, Portugal, Spain, the United States.<sup>74</sup>

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<sup>&</sup>lt;sup>74</sup> See: Table 4.A2.1.Quantifying green employment of the web annex to the Supplement Material for Chapter 4 of the 2012 OECD Employment Outlook ("What Green Growth Means for Workers and Labour Markets: An Initial Assessment"): Summary of Country Responses to the OECD Questionnaire on Green Jobs. Paris 2012; available at: <a href="https://www.oecd.org/els/emp/Chap%204%20Web%20Annex.pdf">https://www.oecd.org/els/emp/Chap%204%20Web%20Annex.pdf</a>

#### 3.2.4. Units of observation and analysis

Two basic units of observation and analysis, the job and the person, are relevant to the measurement of employment in the environmental sector, depending on the objective and measure pursued. While data are likely to be most frequently provided by establishments and households, the usual unit of observation and analysis for green jobs statistics is the job. According to the most recent 19th ICLS Resolution concerning statistics of work, employment and labour underutilization, a job is defined as "a set of tasks and duties performed, or meant to be performed, by one person for a single economic unit".<sup>75</sup>

A job can be formal or informal and can refer to work in employment or in other forms of work, such as volunteer work, trainee work or work in the production of goods and services for own consumption. Most statistics on green jobs will relate to employment, which refers to activities carried out by persons to produce goods or services mainly to generate income. The conceptual model for statistics on green jobs also allows for the production of green jobs statistics for other forms of work. Multiple job holding occurs both within employment and within other forms of work, and when statistics on green jobs are tabulated with reference to persons they therefore need to refer to one or other of the jobs held by the person.

Where the objectives of the statistics include the measurement of how the economy is changing, how establishments re-structure their organisation and production processes and which technologies are used to reduce the environmental impact of the production, the most appropriate unit of observation and analysis is the establishment.

# 3.2.5. Concept and domain of the environmental sector and environment-friendly activities

The environmental sector consists of all economic units that carry out environment-friendly activities, defined in the UN Statistical Commission's System of Environmental-Economic Accounting Central Framework as those economic activities whose primary purpose is to reduce or eliminate pressures on the environment or to make more efficient use of natural resources. These activities are grouped into two broad types of environment-friendly activity (highlighted activities are linked either directly or indirectly with tourism activities):

- Environmental protection activities are defined as those activities whose primary purpose is the prevention, reduction and elimination of pollution and other forms of degradation of the environment. These activities include, but are not limited to, the prevention, reduction or treatment of waste and wastewater; the prevention, reduction or elimination of air emissions; the treatment and disposal of contaminated soil and groundwater; the prevention or reduction of noise and vibration levels; the protection of biodiversity and landscapes, including their ecological functions; monitoring of the quality of the natural environment (air, water, soil, groundwater); research and development on environmental protection; and the general administration, training and teaching activities oriented towards environmental protection.
- Resource management activities are defined as those activities whose primary purpose is reserving and maintaining the stock of natural resources and hence safeguarding against depletion. These activities include, but are not limited to, reducing the withdrawals of natural

<sup>&</sup>lt;sup>75</sup> See at: http://www.ilo.org/global/statistics-and-databases/meetings-and-events/international-conference-of-labour-statisticians/19/WCMS\_234124/lang--en/index.htm

<sup>&</sup>lt;sup>76</sup> The most recent version of SEEA was adopted by the UN Statistical Commission at its 43rd session in 2012; available at: http://unstats.un.org/unsd/envaccounting/seeaRev/SEEA\_CF\_Final\_en.pdf

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resources (including through the recovery, reuse, recycling and substitution of natural resources); restoring natural resource stocks (increases or recharges of natural resource stocks); the general management of natural resources (including monitoring, control, surveillance and data collection); and the production of goods and services used to manage or conserve natural resources.

The SEEA's Classification of Environmental Activities (CEA) provides detailed descriptions and specifications of the activities to be counted as environmental activities, as well as advice on activities not to be included where there are borderline issues. The CEA is a functional classification used to classify environmental activities, environmental products, and environmental expenditures and other transactions. The broad structure of the CEA is presented in Annex IV.

The importance of environmental goods and services may vary across industries, countries and over time.

#### 3.2.6. Employment in the environmental sector

The 19th ICLS proposed to define employment in environmental activities as follows:

Employment in environmental activities "comprises all employment in activities that lead to the production of environmental goods and services for consumption by other economic units or for consumption by the establishment in which the activity is performed. Environmental goods and services are the products of environmental activities as defined in the most recently updated version of the SEEA. In addition to activities in the production of environmental goods and services, this includes activities that improve the establishment's processes in order to reduce or eliminate pressures on the environment or to make more efficient use of natural resources."

This <u>definition includes jobs held by persons in an establishment during a given reference period, whether or not it was their main or a secondary job</u>. It includes managers, professionals, technicians, traders and other workers with specific environmental skills, as well as clerical, services and sales workers, plant and machine operators and elementary workers who work in these EGSS establishments.

It is proposed to make a distinction between employment in the production of environmental goods and services for consumption by other economic units (<u>employment in production of environmental outputs</u>), on the one hand, and for consumption by the economic unit in which the activity is performed (<u>employment in environmental processes</u>), on the other. The proposed approach (i) takes into account the fact that environmental output is not always produced by using environmental processes and technologies, (ii) enables measures of employment in the production of environmental output to be complemented by measures of employment in green processes, (iii) requires different measurement methods.

<sup>&</sup>lt;sup>77</sup> Report III - Report of the Conference , Chapter 4: Green Jobs. 19th International Conference of Labour Statisticians, Geneva, 2 - 11 October 2013; available at:

http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms\_234124.pdf

Employment in the production of environmental outputs covers employment within establishments that produce goods and services that benefit environment. However, these environmental goods and services are not always based on environmentally-friendly production processes and technologies.<sup>78</sup>

Consequently, employment in environmental processes would cover not only employment in companies and institutions that physically produce renewable energy but also employment in companies and institutions that focus on energy-saving activities.

#### 3.3. Green jobs as a measure of sustainable tourism<sup>79</sup>

Sustainable tourism is "tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities"

As has already been discussed in earlier sections, sustainable tourism is directly and positively linked to the SDGs, poverty reduction, rural development, preservation of culture and society, gender equity, environmental protection, climate change mitigation and shows a beneficial impact on climate change mitigation.

The understanding of and commitment for green jobs supporting an adequate transition for workers and employers towards a low carbon, climate change decelerating, environmentally friendly and socially respectful development should be a crucial part of sustainable tourism policies in any tourism oriented country. Green jobs therefore need to be integrated in all tourism related policies on employment and business as well as climate change mitigation with a view to their sustainability.

The *Proposed MST Programme* adopted at the Seventeenth Meeting of the UNWTO Committee on Statistics and the Tourism Satellite Account (Madrid, 24-25 January 2017)<sup>80</sup> has identified the measurement of green jobs a priority research task. Thus, Theme 3 "Tourism employment, green jobs and environmental activity" in Table 1 contains task 7 "Approaches to measuring tourism employment and green jobs for sustainable tourism"; and task 8 "Approaches to recording environmental protection expenditure, environmental taxes, environmental goods and services and green jobs". As is further specified in the Programme, "the task here is to develop a broad framing of employment as it relates to sustainable tourism. This will consider the need for information on the location of employment, occupation and job types, gender and age, training and skills, decent work and green jobs. The discussion of these topics will be considered in the light of broader consideration of these issues in statistics circles including labour and environmental statistics".<sup>81</sup>

<sup>&</sup>lt;sup>78</sup> For example, green buildings or electric cars may be produced by using technologies that have or do not have a negative environmental impact

<sup>&</sup>lt;sup>79</sup> Partially adapted from: *Measuring Employment in the Tourism Industries: Guide with Best Practices.* UNWTO/ILO, Madrid 2014; available at: http://www2.unwto.org/publication/measuring-employment-tourism-industries-guide-best-practices; and Bilsen, Valentijn et al. *Green jobs.* Final report. IDEA Consult in collaboration with RDC Environment (3E). Brussels, May 2010; available at: file:///D:/downloads/Final%20report%20green%20jobs%20IDEA.pdf

<sup>80</sup> http://cf.cdn.unwto.org/sites/all/files/pdf/item\_7.2\_mst\_research.pdf

<sup>&</sup>lt;sup>81</sup> UNWTO Statistics and Tourism Satellite Account Programme. *Proposed MST Programme* adopted at the Seventeenth Meeting of the UNWTO Committee on Statistics and the Tourism Satellite Account (Madrid, 24-25 January 2017; available at: http://cf.cdn.unwto.org/sites/all/files/pdf/item\_7.2\_mst\_research.pdf

#### 3.3.1. Tourism sector and tourism industries

Tourism sector, as contemplated in the Tourism Satellite Account, is the cluster of production units in different industries that provide consumption goods and services demanded by visitors. Such industries are called tourism industries because visitor acquisition represents such a significant share of their supply that in the absence of visitors, their production of these would cease to exist in meaningful quantity.82

The IRTS 2008 provide the following definition of tourism industries<sup>83</sup>:

Tourism industries, also referred to as tourism activities, are the activities that typically produce tourism characteristic products.

Tourism characteristic products are those that satisfy one of both of the following criteria:

- (a) Tourism expenditure on the product (either good or service) should represent a significant share of tourism expenditures (share-of-expenditure/demand condition)
- (b) Tourism expenditure on the product should represent the supply of the product in the economy (share-of-supply condition). This criterion implies that supply of a tourism characteristic product would cease to exist in meaningful quantity in the absence of visitors.

Figure 2 below presents the typology of tourism characteristic consumption products and tourism characteristic activities (tourism industries) grouped in the 12 categories. Categories 1 to 10 comprise the core for international comparisons and are described in Annex I of the IRTS 2008. The two other categories are country specific (see also TSA-Table 7 of the TSA: RMF 2008).

The tourism industries are heavily dependent on the human factor (in addition to other factors such as natural resources, infrastructure and capital) to ensure delivery and quality of its products and services.84

Figure 2. List of categories of tourism characteristic consumption products and tourism characteristic activities (tourism industries)85

	Products	Activities
1.	Accommodation service for visitors	Accommodation for visitors
2.	Food and beverage serving services	2. Food and beverage serving activities
3.	Railway passenger transport services	3. Railway passenger transport
4.	Road passenger transport services	Road passenger transport
5.	Water passenger transport services	5. Water passenger transport
6.	Air passenger transport services	6. Air passenger transport
7.	Transport equipment rental services	7. Transport equipment rental
8.	Travel agencies and other reservation services	Travel agencies and other reservation services activities
9.	Cultural services	9. Cultural activities

<sup>82</sup> World Tourism organization. Understanding Tourism: Basic Glossary, p. 3; at: http://dtxtq4w60xqpw.cloudfront.net/sites/all/files/docpdf/glossaryenrev.pdf

<sup>84</sup> For more information see: Baum, Tom, Human Resource Management in the European Tourism and Hospitality Industry, Chapman & Hall. London 1995.

<sup>85</sup> See Figure 5.1, in IRTS 2008, p.42.

Products	Activities									
10. Sports and recreation services	10. Sports and recreation activities									
11. Country-specific tourism characteristic goods	11. Retail trade of country-specific tourism characteristic goods									
12. Country-specific tourism characteristic services	12. Other country-specific tourism-characteristic activities									

#### 3.3.2. Green jobs in tourism industries

In Sub-section 3.1 of this paper, it is proposed to use the term activities rather than sectors with the rationale behind that traditional sector and subsector classification is not always the most adequate for covering the "green economy" - more and more, "green niches" are becoming apparent in traditional sectors, and many sectors have activities with different shades of green.

Stemming from the typology of tourism-characteristic consumption products and tourism-characteristic activities presented in Figure 2, it is proposed to consider using the same approach to measuring green jobs in the tourism activities (industries), i.e. look for green jobs in relation to tourism-characteristic products and services rather than to the tourism sector.

A number of similarities between the measurement of employment in production of environmental outputs and employment in the tourism industries can be identified.

#### Employment in production of environmental outputs

Employment in the production of environmental outputs is not equal to total employment in the establishments producing environmental goods and services to be consumed outside the producing unit. Many producers of environmental goods and services also produce a range of other goods and services. For example, producer of solar panels may also produce some products that have no environmental purpose and employment in the production of environmental goods and services may therefore be only a relatively small component of their total employment. Consequently, employment in the production of environmental outputs can be measured directly only in specialist environmental establishments whose output is 100 per cent environmental. In establishments where the production of environmental goods and services constitutes only a secondary activity of an establishment (non-specialist producers) or where, if it is a principal activity, it is combined with secondary activities in the same establishment, employment cannot be measured directly unless the jobs are linked to the type of products produced. Linkage of this kind would be costly and difficult to implement in data collection.

#### Employment in the tourism industries

In each country, the tourism industries will include all establishments whose main activity is a tourism-characteristic activity<sup>86</sup>. These tourism industries are common to all countries except for the individual country-specific tourism characteristic activities. It should be noted that persons engaged in tourism-characteristic activities of an establishment belonging to a non-tourism industries (e.g., all establishments whose principal activity is not a tourism-characteristic activity) will not be included in "employment in the tourism industries". On the other hand, persons employed in an establishment

<sup>&</sup>lt;sup>86</sup> United Nations and UNWTO. Department of Economic and Social Affairs. *International Recommendations for Tourism Statistics* 2008. Studies in Methods, Series M No. 83/Rev.1. New York 2010, paras. 6.15. to 6.20.; available at: https://unstats.un.org/unsd/publication/Seriesm/SeriesM\_83rev1e.pdf2008

belonging to a tourism industry who participate in the establishment's non-tourism-characteristic activities will be included in "employment in the tourism industries".87

#### Employment in production of environmental outputs

The main reason why employment in production of environmental outputs cannot be measured directly is the absence of information on employment associated with the production at the product code level. Where direct estimates of employment in the production of environmental goods and services cannot be obtained, it can nevertheless be approximated using the information on the share of output (sales) of environmental goods and services in total output (sales). It is necessary first to calculate the value of environmental goods and services produced as a proportion of the value of the total production of the establishment. The same proportion can then be applied to total employment in the establishment in order to estimate employment in production of environmental outputs. Thus, if 100 per cent of an establishment's outputs are environmental goods and services, then 100 per cent of employment in the establishment is included. If 50 per cent of the output is environmental, 50 per cent of employment is included.

#### Employment in the tourism industries

It should be noted that the total output of a "Tourism Characteristic Industry" (TCI) usually exceeds consumption by visitors, as some of the outputs of most TCIs is purchased by non-visitors. Even for a commodity such as meals in restaurants, visitors' purchases will usually account for a portion of the total number of meals produced. Concurrently, the total employment of a tourism characteristic industry does not necessarily equate to the employment generated by tourism demand. In the above example, output of food services will involve substantial sales to non-visitors. It would be inappropriate to allocate all employment in food services - therefore, it is necessary to use an allocator to approximate more closely the levels of employment generated by tourism sector. This is dealt by the use of the tourism ratio or the tourism value added industry ratio88. This method of using the tourism value added industry ratios involves an assumption that the employment generated by tourism in each industry is in direct proportion to value added generated by tourism in the benchmark year<sup>89</sup>.

Also, coming back to Figure 1 illustrating the shades of green and the impact of green economy on green employment (direct; indirect; and induced) it is possible to assume that similar effect can be attributed to green employment in the tourism industries:

The impact of tourism industries on employment is brought in the following ways<sup>90</sup>:

Direct employment in the tourism industries.<sup>91</sup>

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<sup>87</sup> Idem, para. 7.4.

<sup>&</sup>lt;sup>88</sup> For the main tourism characteristic industries it is possible to identify the tourism share of the production of the main product (around 100%) or other characteristic products (for instance, food and beverage serving services are around 100% tourism related in hotels but not so much in restaurants; accommodation services are around 100% in hotels and hotels produce around 100% of this product in the economy). Tourism Satellite Accounts in the European Union - Vol. 3, p. 54.

<sup>&</sup>lt;sup>89</sup> Unite Nations. Department of Economic and Social Affairs. *International Recommendations for Tourism Statistics* 2008 *Compilation Guide*. Studies in Methods, Series M No.94, New York 2016, p. 18; avilable at: https://unstats.un.org/unsd/tradeserv/tourism/E-IRTS-Comp-Guide%202008%20For%20Web.pdf

<sup>&</sup>lt;sup>90</sup> Idem. pp. 22-23.

<sup>&</sup>lt;sup>91</sup> Tourism employment can be categorized at two separate levels depending on their involvement in or contribution to tourism supply-side. Front offices in hotels, restaurants, travel agencies, tourism information offices, aircrafts, cruise lines, resorts or shopping outlets provide direct employment because their employees are in contact with tourists and cater for tourist demand.

- ii. Indirect employment in the sectors supplying inputs to the tourism industries.<sup>92</sup>
- iii. Induced effect on employment as a result of subsequent rounds of spending.

#### 3.3.3. Employment in environmental processes and green tourism employment

Firstly, it should be noted that measurement of employment in the environmental activities must take account of employment from an output perspective (type of goods and services produced for consumption outside the producing unit) as well as from a process perspective (type of goods and services produced for consumption within the producing unit). The concept and measurement of employment in the production of environmental outputs is linked to certain establishment-related characteristics, while the concept of employment in environmental processes is linked to job-related characteristics such as occupation, skills and tasks, etc.

The second component discussed above, employment in environmental processes, requires the collection of data concerning job-related characteristics such as occupation, the specific tasks and duties undertaken in the jobs and the kind of processes or technologies used.

As these employment characteristics fully apply to job-related characteristics of persons employed in the tourism industries (activities), it is proposed to use the same approach to measuring green tourism employment.

The fact is that occupation on its own is not sufficient to accommodate the requirements of measuring employment in environmental processes. Though a small number of workers employed in occupations such as environmental engineering or refuse sorting may be easily identified because their occupation is entirely environmental, the majority have occupations that involve both environmental and non-environmental activities. Some tasks and duties are divided in such a way that they are undertaken with environmental processes and technologies while the rest of the work involves non-environmental processes and technologies. For example, a planning engineer may spend part of his/her time on work associated with installing recycling equipment in the establishment and part on obtaining permission for commercial premises with no distinguishing environmental characteristics.

An additional problem is that many workers are involved in the production of environmental goods and services for consumption both within and outside the establishment. In order to measure only the part that is related to production of environmental goods and services for consumption within the establishment, it is necessary to split the hours spent on each component in order to estimate the number of full-time jobs. An alternative would be to measure employment in environmental processes regardless of intended consumption. A third option is to split the volume of employment, if possible, in proportion to the value of internal and external consumption.

Similar situations are observed within employment in the tourism industries.

The 19<sup>th</sup> ICLS proposed to make a distinction between workers that spend less than 50 per cent and those that spend more than 50 per cent of their time on environmental processes. It should be recalled

<sup>&</sup>lt;sup>92</sup> Tourism also supports indirect employment in activities like restaurant suppliers, construction companies that build and maintain tourist facilities as well as necessary infrastructure, aircraft manufacturers, various handicrafts producers, marketing agencies, accounting services, which are more or less dependent on the companies providing direct employment for their revenues.

in this regard that the IRTS 2008 recommend that the average hours of full-time workers economy wide be used as the basis for determining the full-time equivalents of part-time jobs:<sup>93</sup>

Likewise employment in environmental processes, green employment in the tourism industries is more difficult to measure and this will involve asking questions that are not routinely included in economic censuses and surveys aimed at measuring production. Establishments can, for example, be asked to provide information on the number of workers employed in activities leading to the production of environmentally-friendly goods and services for tourism consumption within a tourism establishment. Because of the potential increase in respondent burden, information on this component is likely to be collected less frequently than information on total employment in the production of tourism goods and services.

#### 3.3.4. Green jobs in the tourism industries: SEEA and EGSS

The UN Statistical Commission's System of Environmental-Economic Accounting 2012 Central Framework (SEEA)<sup>94</sup> is a statistical framework consisting of a comprehensive set of tables and accounts, which guides the compilation of consistent and comparable statistics and indicators for policymaking, analysis and research.

The EUROSTAT Environmental Goods and Services Sector: A Data Collection Handbook (EGSS)<sup>95</sup> provides guidance on how to collect, interpret and present data on the environmental goods and services sector. It has been elaborated because there is a need to produce and compile comparable statistics on the environmental sector in order to respond to current policy interests and to help implement future policy measures directed at the environmental sector. The aim of the standard tables included in the handbook is essentially to separately identify employment, turnover, value added and exports according to different sectors and activities in the environmental sector.

Although tourism activities are not considered to be activities taking place in the environmental sector *per se*, as we have seen in the earlier discussion, green employment and green jobs can be directly or indirectly linked with such activities. Therefore, the recommendations contained in the two publications are of direct relevance to the developmental work on measuring green jobs for sustainable tourism. Given that, the glossaries of environmental terms and environmental terminology may be particularly useful to identify "green" tourism activities and occupations.

For example, among the economic activities whose primary purpose is to reduce or eliminate pressures on the environment or to make more efficient use of natural resources shown in Sub-section 3.2.5, there are activities that can be attributed to green jobs in the tourism industries (see highlighted activities).

<sup>&</sup>lt;sup>93</sup> Unite Nations. Department of Economic and Social Affairs. *International Recommendations for Tourism Statistics* 2008 *Compilation Guide*. Studies in Methods, Series M No.94, New York 2016, p 181.

<sup>94</sup> Available at: https://unstats.un.org/unsd/envaccounting/seearev/seea\_cf\_final\_en.pdf

<sup>95</sup> Available at: http://ec.europa.eu/eurostat/documents/3859598/5910217/KS-RA-09-012-EN.PDF

In addition, if we compare the suggested list of connected activities presented in Table 1 (p.31) with ecosystem services as defined in SEEA<sup>96</sup>, it becomes quite evident that jobs in "ecotourism" would largely meet the criteria set for such activities.

In this regard, it is important to note that the greening of the economy is a continuing process, and more activities from tourism industries are expected to move into the category of green jobs.

#### 3.3.5. Data collection sources and methods

Data collection is an integral and essential part of developing and updating statistics on green jobs in the tourism industries. Formal data collection activities should be established, adapted to countries' national circumstances and reviewed periodically. In most cases the capacity and willingness of agencies to conduct new surveys will be limited by the resources available and the priorities given to policy needs for various statistics.

The main sources of information that may be used to assess how many green jobs exist in tourism industries (activities) are censuses, labour force and establishment surveys, administrative records (although the latter may not be sufficiently efficient in this particular case). To optimise the resource used, it is suggested that, as far as possible, the required data be collected by extending existing surveys rather than by initiating totally new ones. The possibility of incorporating new questions or modules in existing, on-going or planned surveys should be explored in order to fill the data gaps.

Depending on national priorities, data collection could be focused on key tourism activities (industries) (e.g., the largest in terms of their contribution to the provision of environmentally-friendly goods and services) and/or on those that have the greatest potential to change. A pragmatic approach could be to focus on some resource management subsectors (green tourism, agro-tourism, ecotourism, green resorts and green or eco-hotels, national parks, sports and recreation facilities, environmentally–friendly transport and catering, etc.) where clear benchmarks exist (e.g., specific labels).

Respondent burden may be minimised by the inclusion in questionnaires of filtering questions that identify possible in-scope respondents, so that only those establishments that indicate they provide at least one of the selected environmentally-friendly goods or services would be asked detailed questions on tourism characteristic green job activities.

In order to estimate green employment in the production of environmentally-friendly tourism output, the questionnaire should include, as a minimum, questions on the type of goods and services produced in the establishments surveyed, the value of or sales revenues from these goods and services and the number of persons employed in the establishment.

Information that would allow estimation of employment by each type of environmentally-friendly tourism-characteristic output could be obtained by asking respondents in establishments to indicate whether the production of environmentally-friendly goods or services is their principal or secondary activity, and to

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<sup>&</sup>lt;sup>96</sup> Ecosystem services are the contributions of ecosystems to benefits used in economic and other human activity. Ecosystem services, which are supplied in many ways and vary from ecosystem to ecosystem, may be divided into three groups: (a) provisioning services (such as the provision of timber from forests); (b) regulating services (provided, for example, by forests when they act as a sink for carbon); and (c) cultural services (such as the enjoyment provided to visitors to a national park). Generally, provisioning services are related to the material benefits of environmental assets, whereas the other types of ecosystem services are related to the non-material benefits of environmental assets; SEEA, para. 2.22.

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provide a list of the these goods and services indicating the percentage of total value associated with each environmental good or service. Respondents could be assisted in identifying these goods and services.

Data collected in this way will include volume/value by type of green/environmental outputs (goods and services). For establishments that report that their products are entirely environmentally-friendly, 100 per cent of employment in the establishment will be counted as employment in green employment (e.g., organisation and support of wwoofing<sup>97</sup>). For establishments that undertake both environmentally-friendly and non-environmentally friendly activities, it will be possible to isolate the former, thereby facilitating allocation of an appropriate proportion of total employment in the establishment to the green employment (green jobs).

# 3.3.6. Sustainable tourism and green jobs: types of data to be collected, statistical measures and indicators to be produced

The transition to a green economy and sustainable tourism implies a progressive increase in the share of environmentally-friendly output and employment in the tourism industries. In order to assess whether and how far the green transformation has progressed, information needs to be collected and analysed in a consistent manner on various aspects of the activities of establishments belonging to tourism characteristic industries. This includes information on employment, products, value added. Progress can be assessed using indicators such as the share of these industries in total output and the share of green employment (green jobs) in total tourism employment.

#### Green tourism employment by environmental domain

Breaking down green employment by the environmental domains specified in the SEEA's Classification of Environmental Activities (i.e. environmental protection and natural resource management activities<sup>98</sup>) will allow identification of the type of environmental initiatives that are likely to lead to the creation of more green jobs, as well as the assessment of relative levels of labour productivity.

#### Employment by occupation

For an assessment of skill levels and requirements in the environmentally-friendly tourism industries relatively detailed data on employment by occupation is required for their employees as well as on green employment by the level of skills, level of education and specialised skills required. Analysing the level of education and skills required for green jobs will also reveal the potential of the tourism industries to provide jobs for workers who have a lower level of education or are unemployed.

By way of illustration, an example of green occupations (green jobs) in ecotourism is presented in Box 2 below.

<sup>97 &</sup>quot;Working Weekends on Organic Farms".

<sup>&</sup>lt;sup>98</sup> Natural resource management deals with managing the way in which people and natural landscapes interact. It brings together land use planning, water management, biodiversity conservation, and the future sustainability of industries like agriculture, tourism, fisheries and forestry; see at: https://en.wikipedia.org/wiki/Natural\_resource\_management

#### Box 2: Occupations in ecotourism (an example)

**Development and management**: Tourism development specialist, sustainable tourism business development manager, sustainable development consultancy, ecosystem management and development, ecosystem management and development officer, tourism and human resources advisor.

**Operating ecotourism locations**: Heritage tourism officer, sustainable tourism manager, ecotourism project manager, rainforest station manager, ecolodge manager, cultural tourism project facilities manager, rural tourism officer, sustainable tourism operator, ecotour leaders, green caretakers of tropical island, coastal tourism and conservation program officer, sustainable consumption and conservation manager, conservation expedition country coordinator.

**Managing natural lands**: Nature tourism ranger, nature tourism park manager, parks and recreation director, wildlife visitor centre advisor, reserve director, conservation program manager, conservation project manager, preserve manager, naturalist programmer, conservation expeditions field positions, conservation program assistant.

**Scientific roles**: Conservation scientist, nature centre research technician, biodiversity specialist, wildlife research assistant.

**Promoting ecotourism**: Guidebook writers, protected areas communications officer, responsible tourism communications manager, adventure travel promotion manager, responsible tourism marketing manager.

Source: L. McClelland, Carol. *Green Jobs in Ecotourism*; available at: http://www.dummies.com/careers/career-planning/choosing-a-career/green-jobs-in-ecotourism/

#### Employment by status<sup>99</sup>

Status in employment refers to the type of explicit or implicit contract of employment with other persons or organisations that the person in labour force has in his/her job.<sup>100</sup> The main categories of ICSE-93 have been designed so that they are mutually exclusive and exhaustive of all types of employment contracts, and the rules of application have to be such that to each unit for which the variable can be observed it will be possible to assign only one of these values.

It should be noted that for operational purpose, both the IRTS 2008 and TSA:RMF 2008 recommends to use only two groups of ICSE-93, namely employees and the self-employed. The second recommended classification item is "self-employed" which, as explained above, over-arches the other three major groups of ICSE-93. The rationale is that, except for employees, other ICSE-93 groups are not easily comparable across countries. Because of these differences, the only distinction in both IRTS 2008 and TSA:RMF is made between (paid) employees and the self-employed persons (employers and other non-employees).

Percentage of establishments using green technologies

Statistics on the percentage of jobs in establishments belonging to tourism characteristic industries using green technologies (total and by economic activity) would allow an assessment of general progress towards sustainable tourism.

<sup>&</sup>lt;sup>99</sup> Currently, the ILO Department of Statistics is revising the ICSE-93 and a draft resolution with a revised classification will be presented for discussion at the 20<sup>th</sup> ICLS, scheduled to be held in Geneva in October 2018.

<sup>&</sup>lt;sup>100</sup> International Labour Office. Resolution concerning the International Classification of Status in Employment (ICSE-93), adopted by the 15th ICLS in 1993; available at: http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\_087562/lang--en/index.htm

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#### Wages and hours of work

While collecting data on the number of green jobs in the tourism industries, it will also be useful to collect data on wages and hours of work. This would provide a further insight into the quality of employment in the tourism sector.

#### Specific vulnerable groups

Whenever possible, data on green jobs in the tourism industries should distinguish between different age groups (especially between youth and adults) and between different levels of education and/or training received. A complementary analysis disaggregated by sex is essential for an understanding of the gender patterns of green employment in the tourism industries, and of the differential impact on males and females of particular environmentally-friendly tourism-characteristics initiatives. This will make it possible to measure a degree of women's representation in the green tourism occupations that are expected to grow most strongly.

To summarise, in order to adequately analyse green employment and green jobs in the tourism industries, it is recommended that countries collect the following key variables for each of the tourism industries, as specified in IRTS 2008, Chapter 7 and for the tourism industries as a whole:

- (i) Green employment by sex and age group;
- (ii) Green employment by type of establishments;
- (iii) Green employment classified by occupation and status in employment;
- (iv) Permanent/temporary green employment expressed in terms of number of jobs, hours of work, full-time equivalent, etc.

#### 3.4. Methodologies for assessing green jobs<sup>101</sup>

## 3.4.1. Inventories and surveys

Surveys and inventories can provide a simple and effective way of assessing how many green jobs exist in specific sectors, regions or countries. A survey is usually carried out in the form of a questionnaire sent out to relevant companies, government departments or analysts, while an inventory commonly draws on a national or regional database to provide employment statistics. Some such studies are comprehensive, while others offer only a snapshot or "scale-up" a more limited review so that it can provide an estimate of green jobs for a whole country or region. Inventories and surveys, if repeated consistently over a prolonged period, can also provide a useful measure of the extent of the new employment realised by policies aimed at developing employment in sustainable sectors.

A study carried out by the Spanish government estimated the number of green jobs in Spain to be 530,947 in 2009, equivalent to 2.6% of Spain's working population (See Table 2). The extensive research employed a combination of both interview and survey techniques to identify and quantify green jobs, and to calculate totals on a sector basis. The approach chosen meant that only direct green employment was included in the total number of green jobs, though the depth of analysis was also able to provide some information as to the potential within each sector for the generation of new employment.

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<sup>101</sup> Adapted from: ILO. *Methodologies for assessing green jobs: Policy brief.* February 2013. Available at: http://www.ilo.org/wcmsp5/groups/public/---ed emp/---emp ent/documents/publication/wcms 176462.pdf

In our view, looking at the data presented in Table 2 and keeping in mind that Spain is one of the 5 top European tourism destinations (No. 3 in 2013), it is highly probable that an important share of these green jobs were located in tourism industries.

Table 2. Green jobs in Spain, 2009												
Sector	No. of jobs											
Waste water treatment and	58,264											
purification												
Management and treatment of	140,343											
waste												
Renewable energy	109,368											
Forest management	32,400											
Environmental services to business												
Environmental education	26,354											
Organic agriculture and stock	7,871											
breeding												
Management of green spaces	49,867											
Industry and services	10,935											
Public Sector	20,004											
Environmental research and	53,072											
development	21,929											
Services	540											
Total 530,947	530,947											

Source: Green Jobs in a Sustainable Economy.

### 3.4.2. Input-output analysis and Social Accounting Matrices

Input-output (I-O) analysis and Social Accounting Matrices (SAMs)<sup>102</sup> are empirical tools that rely on the construction of a matrix or table listing all subsectors in an economy and detailing how outputs from one sector are used as inputs in others. These models draw on information from the national accounts and are the most widely employed methodology for assessing green jobs.

In the Table 3 below, the rows show the total output of an industry that is consumed by either other sectors or through final demand (e.g. household consumption). The columns show the share of inputs a sector uses in order to reach its final output.

The basic input-output model measures how much additional output is needed from each sector to meet an increase in final demand. If information on the labour intensity of the different sectors in an economy can be obtained, then the matrix can be used to estimate the effect on employment of an increase in demand for a green service or product. Thus, these models can be used to answer questions such as "How many jobs might result from a given programme of investment in sustainable economic areas?" or "For a given level of investment, which sector or sectors would yield the greatest number of jobs?" I-O models and SAMs are usually used to provide short to medium term projections for policies.

<sup>&</sup>lt;sup>102</sup> The difference between I-Os and SAMs: Whilst I-O tables provide a disaggregation of the system of production and can illustrate the interactions within it, SAMs go further by describing the interrelationships of income and transfer flows between different institutional units.

Table 3. Simplified Input-output table

	Agriculture	Food & beverages	Land transport	Final demand	Total output			
Agriculture	1323	2290	6	1911	6467			
Food & beverages	333	1390	17	8074	11670			
Land transport	34	261	480	5794	10775			

Source: ILO. Assessing green jobs potential in developing countries: A practitioner's guide. Geneva 2011.

Likewise in the earlier case, many green jobs linked with Table 3 may be found in tourism industries. There are other methods for assessing green jobs<sup>103</sup> but the objective of this report is to make a general overview of green jobs paradigm rather than detailed presentation or discussion of methods, tools and measurement frameworks.

#### 3.5. Potential use of TSA for measuring green jobs in the tourism industries

As has been stated in Sub-section 2.3.2 of this paper, the international conceptual framework for tourism statistics is largely provided by the Tourism Satellite Account (TSA).<sup>104</sup> It serves a practical conceptual framework reconciling tourism supply and demand, for which the data produced by various statistical sources must be compatible; helps the policy-makers to understand what tourism is, its socioeconomic impact and the role it plays in trade, investment and economic development. Thus, the TSA helps to organise the decision-making process in a more systematic way. It provides those involved in tourism with a common, credible methodology and offers a complete data base with mutually consistent data, comparable over time, for the purpose of measuring the economic importance of tourism at national level.

The TSA framework is linked to the SNA, which provides an overall framework for organising economic data and enables policy-makers to compare the tourism industries with other national industries and thus to steer their policy decisions by taking an overall view of tourism in relation to other sectors of the economy.

#### 3.5.1. TSA and its Table 7: Employment in the tourism industries

While the TSA necessarily requires a modelled component (estimation of tourism shares of the productive activities serving visitors), it is essentially a set of accounts presented in tables. Based on the information about tourism-characteristic products and tourism industries (see Sub-section 3.2.1 above) a full set of TSA accounts consisting of 10 tables can be compiled. These tables are consistent with the general supply and use of tables established by countries at the national level to describe the general economic balance of goods and services and the production accounts of the producers following the System of National Accounts 2008.

<sup>103</sup> For example, employment factors, computable general equilibrium (CGE) models and system dynamics, etc.

<sup>&</sup>lt;sup>104</sup> United Nations Department of Economic and Social Affairs, Statistics Division. *Tourism Satellite Account: Recommended Methodological Framework 2008* (TSA:RMF 2008). Luxembourg, Madrid, New York, Paris, 2010; available at: <a href="http://unstats.un.org/unsd/publication/Seriesf/SeriesF\_80rev1e.pdf">http://unstats.un.org/unsd/publication/Seriesf/SeriesF\_80rev1e.pdf</a>

The first three tables consist of tourism expenditure. Table 4 shows a breakdown between domestic and inbound tourism and the adjustments that need to be made to move from tourism expenditure to tourism consumption. Table 5 shows the supply of the tourism industry. Table 6 is the heart of the TSA and shows the main aggregates derived. Table 7 covers employment. Tables 8 and 9 cover fixed capital and collective consumption. Table 10 covers non-monetary information.

Notably Table 7 is covering "employment in the tourism industries" in terms of number of jobs; hours of work; and full-time equivalent jobs by status in employment of employees and self-employed, and number of establishments, all broken down by sex and twelve tourism characteristic industry/activity groups.<sup>105</sup>

For estimating tourism employment, tourism ratios based on TSA Table 6, are applied to TSA Table 7 by tourism industries and the respective results are summed up.

In relation to TSA Table 7, it is also important to consider that measurement of employment is limited to employment in the tourism industries only. This means that the indirect effects of tourism on the total employment should not be taken into account. Persons providing tourism-characteristic services of an establishment belonging to a non-tourism characteristic industry (e.g. establishment whose principal activity is "agriculture") should not be included in "employment in the tourism industries". However, persons employed in an establishment belonging to a tourism characteristic industry who participate in the establishment's non-tourism-characteristic activities (e.g. in "information and communication") will be included in "employment in the tourism industries".

### 3.5.2. Green jobs in the tourism industries: proposed extension of TSA

According to the information available in the 2012 OECD Employment Outlook<sup>106</sup>, the following countries were measuring the number of green jobs at the time of the OECD survey: Austria, Canada, Finland, Germany, Korea, Portugal, Switzerland and the United States.<sup>107</sup> It is highly probable that by now, many more countries have started collecting and publishing green jobs statistics.

Reviewing statistics on employment in the tourism industries collected by the UNWTO member States, one can observe that Austria, Canada, Ireland, New Zealand, Portugal, Spain, Switzerland, the United Kingdom and few other countries produce comprehensive statistics on employment in the tourism industries. Notably, the TSA of Austria and the Human Resource Module (HRM) of the Canadian Tourism Satellite Account (HRM:TSA) demonstrate the potential of these tools to produce robust, rich and diversified statistics on employment in the tourism industries.

<sup>&</sup>lt;sup>105</sup> United Nations Department of Economic and Social Affairs, Statistics Division. *Tourism Satellite Account: Recommended Methodological Framework 2008* (TSA:RMF 2008). Luxembourg, Madrid, New York, Paris, 2010, pp. 64-65; available at: <a href="http://unstats.un.org/unsd/publication/Seriesf/SeriesF\_80rev1e.pdf">http://unstats.un.org/unsd/publication/Seriesf/SeriesF\_80rev1e.pdf</a>

<sup>&</sup>lt;sup>106</sup> See: Table 4.A2.2.Quantifying green employment of the web annex to the Supplement Material for Chapter 4 of the 2012 OECD Employment Outlook ("What Green Growth Means for Workers and Labour Markets: An Initial Assessment"): Summary of Country Responses to the OECD Questionnaire on Green Jobs. Paris 2012; available at: <a href="https://www.oecd.org/els/emp/Chap%204%20Web%20Annex.pdf">https://www.oecd.org/els/emp/Chap%204%20Web%20Annex.pdf</a>

<sup>&</sup>lt;sup>107</sup> This questionnaire was sent to employment and labour ministries in OECD member governments in November of 2010 and the information provided corresponds to policies in place at that time.

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Given the above and in accordance with its *Proposed Research Programme*<sup>108</sup>, the MST Working Group may wish to consider the following approach to developing methodology to measure green jobs in the tourism industries as a supplementary indicator of tourism sustainability.

It is proposed to extend TSA Table 7 by compiling a new Table 7a: "Green employment in the tourism industries".

Table 7a: Green employment in the tourism industries 109

	Tourism industries	Number of establishments with green jobs	Number of green jobs by status in employment (*)						Number of hours worked by status in employment (*)					Number of full-time equivalent green jobs by status in Employment (*)						
			Employees			Self-employed			Employees			Self-employed			Employees			Self-employed		
			M	F	T	М	F	T	M	F	T	M	F	T	M	F	Т	M	F	Т
	1 – Accommodation for visitors     1.a – Accommodation services for visitors other than 1.b     1.b – Accommodation services associated with all types of vacation home ownership     2 – Food and beverage serving industry     3 – Railways passenger transport     4 – Road passenger transport     5 – Water passenger transport     6 – Air passenger transport     7 – Transport equipment rental     8 – Travel agencies and other reservation services industry     9 – Cultural industry     10 – Sports and recreational industry     11 – Retail trade of country-specific tourism characteristic goods     12 – Country specific tourism industries																			
	Total																			

(\*) in the reference period

As in the case of total tourism employment, the compilation should be based on ratios produced from TSA Table 6 (ratio between the total value of tourism share and total value of environmentally-friendly output) and applied to Table 7 to estimate green jobs in the tourism industries.

Evidently, this exercise could be carried out only in countries already compiling statistics on the number of green jobs in the national economy.

We understand that in the absence of the internationally agreed definition of "a job in a tourism industry", this would be a challenging task. However, we believe that this issue could be temporarily resolved using the definition suggested in Box VII.10 of the IRTS-2008 Compilation Guide<sup>110</sup> (see Box 3 below).

In parallel, like the ILO at the time of ISCO-88 updating<sup>111</sup>, the UNWTO may use the opportunity of the MST Working Group platform and organise a global consultation on the above definition. Also, like in

<sup>108</sup> http://cf.cdn.unwto.org/sites/all/files/pdf/item 7.2 mst research.pdf

 <sup>109</sup> Adapted from: United Nations. *Tourism Satellite Account: Recommended Methodological Framework 2008*, Luxembourg, Madrid, New York, Paris, 2010, pp. 64-65; available at: <a href="https://unstats.un.org/unsd/publication/Seriesf/SeriesF\_80rev1e.pdf">https://unstats.un.org/unsd/publication/Seriesf/SeriesF\_80rev1e.pdf</a>
 110 Unite Nations. Department of Economic and Social Affairs. *International Recommendations for Tourism Statistics 2008 Compilation Guide*. Studies in Methods, Series M No.94, New York 2016, p. 183; available at: <a href="https://unstats.un.org/unsd/tradeserv/tourism/E-IRTS-Comp-Guide%202008%20For%20Web.pdf">https://unstats.un.org/unsd/tradeserv/tourism/E-IRTS-Comp-Guide%202008%20For%20Web.pdf</a>

<sup>111</sup> The ILO set up Technical Expert Group on updating ISCO-88; consultations were carried out through meetings and an electronic discussion.

the case of ISCO-88 updating, the definition could be approved by the UNWTO Committee on Statistics and Tourism Satellite Account and thereafter presented to the UN Statistical Commission for its endorsement.<sup>112</sup>

## Box 3. International Standard Classification of Occupations: "job"

In the context of ISCO-08 a job is defined as a set of tasks and duties performed, or meant to be performed, by one person, including for an employer or in self-employment\*.

Through the application of this definition a job in a tourism industry could be defined as a set of tasks and duties performed, or meant to be performed, by one person in an establishment that carries out a tourism characteristic activity as its principal activity.

\* Source: International Labour Office International Standard Classification of Occupations: Structure, group definitions and correspondence tables (ISCO-2008), Box VII.10, p. 11, para.41; available at:

http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\_172572.pdf

A small "virtual sub-group" or a "virtual Task Force" could be created within the MST Working Group that could work through a web platform. The work of such sub-group or a Task Force could begin by reviewing the Room Document of the 19<sup>th</sup> ICLS "Proposal for Identifying Characteristic Occupations of the Tourism Industries as a Tourism Thematic View within ISCO-08 and National Occupational Classification Systems" which is largely based on the Canadian experience, and develop it further.

In the meantime, the MST Working Group could launch a pilot study on the mechanism and methodology of compiling TSA Table 7a. In our opinion, Austria and Canada could be excellent candidates for such an exercise. To recall, both countries reported having green jobs national definitions and they produce comprehensive data on employment in the tourism industries based on the TSA:RMF 2008.<sup>114</sup> Evidently, other countries could volunteer participating in the pilot exercise of the MST Working Group.

The outcome of the above initiative could be threefold: (i) internationally agreed definition of a job in a tourism industry; (ii) methodology for the compilation of TSA Table 7a to measure green jobs as an indicator of sustainable tourism; and (iii) Draft International Classification of Characteristic Occupations of the Tourism Industries.

<sup>&</sup>lt;sup>112</sup> Given the urgency and need for the updated ISCO for the 2005-2014 Population Census round, ISCO-08 was exceptionally adopted as a resolution of a Meeting of Experts on Labour Statistics in December 2007. This meeting was convened by the Governing Body of the ILO in response to a request made by the 17th International Conference of Labour Statisticians in 2003. It was subsequently endorsed by the Governing Body of the ILO in March 2008.

<sup>&</sup>lt;sup>113</sup> International Labour Office. Issue: *Proposal for Identifying Characteristic Occupations of the Tourism Industries as a Tourism Thematic View within ISCO-08 and National Occupational Classification Systems*. Room Document 13, 19th International Conference of Labour Statisticians, Geneva, 2-11 October 2013; available at:

http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms\_222947.pdf

<sup>114</sup> It should be noted though that in case of Canada, this will be TSA:HRM (fully compatible with TSA:RMF 2008) and the extended tables of the Human Resource Module of the Tourism Satellite Account would be labelled Table 3a: "Green jobs in tourism industries and total economy"; and Table 5a: "Employee green jobs, hours and wages by employee characteristics in tourism industries"; http://www.statcan.gc.ca/pub/13-604-m/2013072-eng.pdf

#### **Conclusions**

The paper has presented an overview of the activities and major outputs produces within the framework of the ILO/UNWTO Joint Initiative on Tourism, Employment and Decent Work. It has also reviewed the ILO's and UNWTO's contribution to shaping SDGs and the UNWTO's vision of the nature of sustainable tourism and its dimensions.

Chapter 3: *Green jobs dimension of sustainable tourism* represents the most comprehensive part of the paper. It has been structured and written with an attempt to present a workable approach to the measurement and use of green jobs as a valid and complementary dimension of sustainable tourism.

Another objective of Chapter 3 has been to serve basis for a further framing of the SF-MST and in particular contribute to the eventual technical discussion of Theme 3: *Tourism employment, green jobs and environmental activity* of the Proposed MST Research Programme planned to begin in September 2017.

The participants of the Conference are invited to share their views and provide comments on the approach and measurement framework proposed.

\* \* \*

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# Annex I. UNWTO Seminar: Employment in Tourism – Realizing Its Full Potential - Recommendations

#### Background

On 19-20 November 2013, the World Tourism Organization (UNWTO) organized a Seminar on *Employment in Tourism – Realizing its Full Potential*. The event was jointly organized with "Escuela de Organización Industrial" and supported by Club Malaga Valley.

The seminar was to consider different national practices in measuring employment in tourism. It also discussed challenges and possible solutions to provide governments, policy makers and specialists in tourism development with reliable statistical indicators on employment and conditions of work in the tourism sector measuring various dimensions of tourism labour market.

The recommendations below have been prepared by the UNWTO Secretariat on the basis of discussions, suggestions and recommendations made by the seminar participants.

#### Recommendations

#### 1. List of tourism characteristic occupations

The absence of the internationally agreed list of tourism characteristic occupations makes it difficult to both measure employment in tourism in general and quality of employment in tourism in particular. Given the fact that a number of countries, and notably Canada, have advanced with the development of a national classification of tourism characteristic occupations, it is recommended that the UNWTO takes the lead in developing such a list with technical support from the ILO and national experts. To organise such work, a thematic Expert or Working Group could be created under the auspices of the UNWTO.

#### 2. Measurement of employment in tourism

Currently, statistics on employment in tourism are not systematically generated by the National Statistical Systems (NSS) of countries, particularly of developing countries. The quality of the available tourism employment statistics, beyond global totals, is questionable in many developing countries, and possibly even in developed countries. They are generally generated using practically "heroic assumptions". For purposes of tourism planning and job creation programme interventions, there is a need to systematically generate (in the NSS) better quality tourism employment statistics with the appropriate levels of disaggregation. It is recommended that the UWTO considers mobilizing resource, both financial and human, to provide technical assistance to the NSO's and national travel authorities in building up and/or enhancing their capacity in measuring employment in tourism.

#### 3. Capacity building of NSO's and national tourism authorities: IRTS 2008 Compilation Guide

There needs to be a set of priorities in guiding countries and the IRTS 2008 provides a comprehensive methodological framework for the collection and compilation of tourism statistics in all countries irrespective of the level of development of their statistical systems. Detailed comments and explanations of different concepts introduced and used in IRTS 2008, orientation on the issues behind these recommendations, guidance on how to compile the recommended variables and aggregates and examples of how some countries have solved some of the problems in implementing the recommendations are given in the IRTS 2008 Compilation Guide. *It is recommended that the UNWTO* 

develops a comprehensive modular training course based on the IRTS 2008 Compilation Guide and organizes a series of regional, sub-regional and national training courses on various chapters of IRTS 2008. Special attention should be paid to the measurement of employment beyond the TSA.

#### 4. Measuring employment in tourism beyond the TSA.

TSA Table 7. Employment in the tourism industries is a very useful tool. However, governments, policy makers and specialists in tourism development need reliable statistical indicators on employment, occupations, income, compensation, hours of work of person employed and their conditions of work in the tourism sector in order to measure various dimensions of tourism labour market. A number of countries have already fully developed an advanced set of statistical procedures and derivative applications for measuring and analyzing a multitude of employment aspects in the tourism industries much needed to develop, implement and monitor efficient tourism labour market policies and actions. It is recommended that the UNWTO should equally promote both the compilation of TSA Table 7 and recommendations of the IRTS 2008 Chapter 7. Measurement of employment the tourism industries, which build on TSA:MRF and provide conceptual and methodological framework to produce a multi-dimensional employment variables on both jobs and persons employed.

### 5. Employment in the tourism industries versus tourism employment

There are two different conceptual frameworks used to measure employment in the tourism sector, namely (a) employment in the tourism industries and (b) tourism employment. The difference between the two concepts stems from the fact that while the former refers to all the jobs (or persons engaged) in both tourism-characteristic activities and non-tourism-characteristic activities in all establishments in tourism industries, the latter measures jobs in tourism industries that could be attributable to tourism spending plus jobs in non-tourism industries that could be directly attributed to tourism spending. However, TSA Table 7. *Employment in the tourism industries* is often misinterpreted. Thus, recommendations of IRTS 2008 Chapter 7 provide conceptual measurement of employment in the tourism industries. TSA:MRF seems to be about employment in the tourism industries as well. However, many countries associate TSA Table 7 with direct tourism employment. *Given the existing misinterpretation, the UNWTO need to look carefully at IRTS 2008 and TSA: RMF 2008 to clarify and promote the correct terminology and use of these international standards*.

#### 6. TSA Table 7. Employment in the tourism industries

The UNWTO should become a clearinghouse of continuously updated information on the number of countries compiling TSA and its Table 7 in particular. It is recommended that the UNWTO prepares a comprehensive report on the national practices of compiling TSA Table 7 and employment indicators it contains: employment in the tourism industries, (direct) tourism employment or both.

#### 7. Quality of tourism employment

Currently, there is no uniform, internationally agreed concept of a quality job in the tourism sector. The OECD Tourism Committee (TC) is implementing a project entitled Supporting Quality Jobs in Tourism. This project examines approaches to supporting the quality of tourism jobs, with a particular focus on enhancing skills and career development opportunities for people employed in tourism SMEs. Based on the OECD questionnaire returns, a comprehensive report will be prepared on countries' concepts and practices of measuring tourism quality jobs. It is recommended that the UNWTO taps on the OECD work and organises a Seminar on Measuring Quality Employment in Tourism.

#### 8. Subnational perspective

Countries need to make the most of available data. There is a need for disaggregated data at a subnational, or even sub-regional, level. This makes possible getting a different granularity of data much needed for policy making and research. It is recommended that the UNTWO considers prioritizing this dimension in its future methodological and advisory work plan.

### 9. International workshops, seminars, conference on tourism and employment statistics

The participants expressed their high appreciation to the organizers for convening the seminar which offered a knowledge-sharing platform for the production of reliable, timely, comprehensive and consistent statistics on employment in the tourism industries. In their numerous interventions, speakers and presenters requested the UNWTO to consider organising such professional meetings more often. It is recommended that the UNWTO uses the opportunity of the Fourteenth Meeting of the Committee on Statistics and Tourism Satellite Account and discusses the topical issues which could become subject to convening technical meetings with the participation of users and producers of tourism statistics. A special emphasis should be made on various aspects of measuring employment in the tourism sector.

# Annex II. ILO contribution to shaping SDGs

The international community (based on the results of 4th meeting of the IAEG-SD, Geneva, 15-18 November 2016), has recommended the ILO will be custodian for:

- 14 indicators (3 jointly with other UN agencies); and
- · Involved agency for 4 indicators.

The 18 indicators for which the ILO is custodian or an involved agency are presented below: 115

### Goal 1. End poverty in all its forms everywhere

**1.3.1** Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, new-borns, work-injury victims and the poor and the vulnerable

#### Goal 5. Achieve gender equality and empower all women and girls

5.5.2 Proportion of women in managerial positions

# Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

- 8.2.1 Annual growth rate of real GDP per employed person
- **8.3.1** Proportion of informal employment in non-agriculture employment, by sex

#### Indicators where the ILO is custodian agency

- 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities
- 8.5.2 Unemployment rate, by sex, age and persons with disabilities
- **8.6.1** Proportion of youth (aged 15-24 years) not in education, employment or training
- 8.7.1 Proportion and number of children aged 5-17 years engaged in child labour, by sex and age
- 8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status
- **8.8.2** Level of national compliance of labor rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status
- **8.b.1** Existence of a developed and operationalized national strategy for youth employment, as a distinct strategy or as part of a national employment strategy.

<sup>&</sup>lt;sup>115</sup> The list of SDGs indicators is in line with the proposal made to the 48th Statistical Commission Meeting (7-10 March 2017); available at: https://unstats.un.org/unsd/statcom/48th-session/documents/2017-2-IAEG-SDGs-E.pdf

### Goal 10. Reduce inequality within and among countries

- **10.4.1** Labour share of GDP, comprising wages and social protection transfers
- 10.7.1 Recruitment cost borne by employee as a proportion of yearly income earned in country of destination.

#### Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development

14.c.1 Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nation Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources.

#### 3.2. Additional list of indicators

The four indicators, where the ILO is an involved agency are presented below:

- **1.1.1** Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)
- **1.a.2** Proportion of total government spending on essential services (education, health and social protection)
- 4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex
- 16.10.1 Number of verified cases of killing, kidnapping, enforced disappearance, arbitrary detention and torture of journalists, associated media personnel, trade unionists and human rights advocates in the previous 12 months

# Annex III. An overview of concepts and definitions related to the green economy

# Sustainable development United Nations Brundtland Report<sup>116</sup> (1987)

The United Nations Brundtland Report (1987) included what is now one of the most widely recognised definitions: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

According to the same report, the above definition contains within it two key concepts:

- the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs. [8]

# Green growth OECD (2011)<sup>117</sup>

Green growth is about fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies. To do this it must catalyse investment and innovation which will underpin sustained growth and give rise to new economic opportunities. (OECD. 2011. Towards Green Growth: Monitoring Progress OECD Indicators) **ESCAP (United Nations Economic and Social Commission for Asia and the Pacific)**<sup>118</sup>

Green growth is environmentally-sustainable economic progress that fosters low-carbon, socially inclusive development. It articulates concise and clear entry points and policy approaches for making real gains in eco-efficiency and transferring to low-carbon development: synergizing climate action with development goals. Green Growth comprises six, mutually-reinforcing "Paths", or entry points, through which policy makers can focus interventions: Sustainable Consumption and Production (SCP), Greening Business and the Markets (GBM), Sustainable Infrastructure (SI), Green Tax and Budget Reform (GTBR), Investment in Natural Capital (INC), and Eco-efficiency Indicators (EEI).

### Green economy

Various agencies of the United Nations system have identified green economy as "investment in sectors such as energy efficiency technologies, renewable energy, public transport, sustainable agriculture, environment friendly tourism and sustainable management of natural resources, including ecosystems and biodiversity" aimed at generating new areas of production, quality jobs and an increase in income, while serving to mitigate climate change and protect biodiversity (United Nations).

UNEP (2011)<sup>119</sup>

The United Nations Environment Programme (UNEP) defines a green economy as one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In its simplest expression, a green economy can be thought of as one which is low

<sup>116</sup> http://conspect.nl/pdf/Our Common Future-Brundtland Report 1987.pdf

<sup>117</sup> http://www.oecd.org/dataoecd/37/33/48224574.pdf

<sup>118</sup> http://www.greengrowth.org

<sup>119</sup> http://www.unep.org/greeneconomy/Portals/88/documents/ger/GER\_synthesis\_en.pdf

carbon, resource efficient and socially inclusive. In a green economy, growth in income and employment should be driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services. These investments need to be catalysed and supported by targeted public expenditure, policy reforms and regulation changes. The development path should maintain, enhance and, where necessary,

rebuild natural capital as a critical economic asset and as a source of public benefits, especially for poor people whose livelihoods and security depend on nature. (UNEP. 2011. Towards a Green Economy –

XVII Meeting of the Forum of Ministers of Environment of Latin America and the Caribbean – held in Panama City, Panama, from 26 to 30 April 2010

This meeting defined a Green Economy as a system of economic activities related to the production, distribution and consumption of goods and services that results in improved human well-being over the long term, whilst not exposing future generations to significant environmental risks and ecological scarcities. It is environmentally friendly and ecological, and for many groups, it is also socially just."

#### **UNCTAD**

The United Nations Conference on Trade and Development (UNCTAD) defines green economy as a productive process resulting from the improvement of human well-being and the reduction of inequalities, while limiting the significant scarcity risks at the environmental level for future generations.

# Greening the economy

Pathways to Sustainable...)

Greening the economy is a strategy under consideration by countries to enhance the quality of life of their citizens and to pursue sustainable development goals. The transformation of traditional economies into green economies is **based on making investments in technologies**, systems and infrastructures that enhance productive economic activities while optimizing natural resource utilization and minimizing environmental impacts. The objective is to foster investments supporting social and environmental goals that would act as drivers for, instead of barriers to, sustainable economic growth.

#### Green industries/ Environmental Goods and Services Sector (EGSS)

#### Eurostat Handbook (2009) – Based on OECD/Eurostat definition in 1999<sup>120</sup>

The Environmental Goods and Services Sector (EGSS) includes producers of technologies, goods and services that:

- Measure, control, restore, prevent, treat, minimize, research and sensitize environmental damages to air, water and soil as well as problems related to waste, noise, biodiversity and landscapes. This includes "cleaner" technologies, goods and services that prevent or minimize pollution.
- 2) Measure, control, restore, prevent, minimize, research and sensitize resource depletion. This results mainly in resource-efficient technologies, good and service that minimize the use of natural resources.

<sup>120</sup> http://epp.eurostat.ec.europa.eu/cache/ITY\_OFFPUB/KS-RA-09-012/EN/KS-RA-09-012-EN.PDF

**Green industry statistics in the Republic of Korea** (Lee Jae-Won from Statistics Korea at the UNEP Workshop, Nov 2011, on Measuring "Green...)

The green industries are defined as those industries that produce goods and services that enhance energy- and resource efficiency, reduce greenhouse gases and improve the environment. These are determined on the basis of the green products classification system, for which a concordance table with the classification system of the EGSS has been developed.

#### **Greening of occupations**

### The US National Center for O\*NET Development (2009)<sup>121</sup>

"Greening of the World of Work: Implications for O\*NET, SOC and New and Emerging Occupations" (2009)

The 'greening' of occupations refers to the extent to which green economy activities and technologies increase the demand for existing occupations, shape the work and worker requirements needed for occupational performance, or generate unique work and worker requirements."

<sup>121</sup> http://www.onetcenter.org/dl\_files/Green.pdf),(http://www.onetcenter.org/reports/Green.html

# Annex IV. Specific policy issues for which statistics on green jobs are required 122

# Specific policy issues for which statistics are required Job creation and loss

- What is the net employment-creation effect arising from a particular type of investment, climate change policy or environmentally motivated economic stimulus?
- What is the overall impact of environmental and economic policies on the labour market?
- What is the potential for green employment growth?
- What is or will be the employment shifts across and within sectors? Which industries and types of workers are negatively affected?

#### Changes in occupational and skills needs

- What are or will be the transitions in employment patterns across occupations? For which occupations will there be increasing or decreasing demand?
- What new occupations are being created? What existing occupations are becoming greener?
- What new skills need to be developed? What are the consequences for education and training systems if they are to adapt to the development of new areas of growth and new technologies?
- Are there skills bottlenecks? If so, in which sectors and occupations? What are the skills gaps? How many people need to be trained in what skills in the transition to a green economy?

#### Organisational restructuring

- How many establishments restructure their organisation and production processes to use less energy, to reduce emissions, to use cleaner technologies and/or to produce green products and services?
- What are the consequences of such restructuring for workers?

#### **Decent work**

A -- -- -- -- --

- Are newly created green jobs good and decent? Is the transition to the low carbon green economy socially just? Which groups are affected in a positive way, and which groups may be disadvantaged? Are newly created green jobs accessible to all?
- Do particular green initiatives have a negative impact on particular social groups, on food

<sup>&</sup>lt;sup>122</sup> Proposals for the statistical definition and measurement of green jobs. Room Document: 5. 19th International Conference of Labour Statisticians Geneva, 2-11 October 2013.

# Annex V. Classification of Environmental Activities - Overview of groups and classes<sup>123</sup>

The broad structure of the CEA is presented below:

### I. Environmental Protection (EP)

- 1 Protection of ambient air and climate
- 2 Waste water management
- 3 Waste management
- 4 Protection and remediation of soil, groundwater and surface water
- 5 Noise and vibration abatement (excluding workplace protection)
- 6 Protection of biodiversity and landscapes
- 7 Protection against radiation (excluding external safety)
- 8 Research and development for environmental protection
- 9 Other environmental protection activities

#### II. Resource Management (RM)

- 10. Management of mineral and energy resources
- 11. Management of timber resources
- 12. Management of aquatic resources
- 13. Management of other biological resources (excl. timber and aquatic resources)
- 14. Management of water resources
- 15. Research and development activities for resource management
- 16. Other resource management activities

Environmental activities can be carried out by all economic units, as main, secondary or ancillary activities. A distinction is made between (i) specialist producers, (ii) non-specialist producers, and (iii) own-account producers of environmental goods and services.

These units produce, design and manufacture at least some goods and services for purposes of environmental protection and resource management. The types of environmental goods and services are as follow:

- a. Environmental specific services comprise environmental protection and resource management specific services produced by economic units for sale or own use. Examples of environmental specific services are waste and wastewater management and treatment services and energy and water saving activities.
- b. Environmental sole-purpose products are goods (durable or non-durable) or services whose use directly serves an environmental protection or resource management purpose and which have no use except for environmental protection or resource management. Examples of such products and services include catalytic converters, septic tanks (including maintenance services), catalytic converters for vehicles, trash bags, bins, rubbish containers, compost containers and the installation of renewable energy production technologies (e.g. installation of solar panels).

<sup>123</sup> Detailed classes and definitions for activities can be consulted at: http://unstats.un.org/unsd/envaccounting/White\_cover.pdf

- c. Adapted goods are goods that have been specifically modified to be more "environmentally friendly" or "cleaner" and whose use is therefore beneficial for environmental protection or resource management. Examples of adapted goods include de-sulphurised fuels, mercury-free batteries and CFC-free products.
- d. Environmental technologies are technical processes, installations and equipment (goods) and methods or knowledge (services) whose technical nature or purpose is environmental protection or resource management. Environmental technologies can be classified as either:
  - end-of-pipe (pollution treatment) technologies, or
  - integrated (pollution prevention) technologies.