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# Rovaniemi Action Plan for the Forest Sector in a Green Economy Mid-term Review



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# Rovaniemi Action Plan for the Forest Sector in a Green Economy Mid-term Review

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**Forestry and Timber Section, Geneva, Switzerland**



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## NOTE

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## ABSTRACT

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This publication is a mid-term review of actions that have been implemented and are in line with the Rovaniemi Action Plan (RAP). Stakeholders of the RAP provided input and the Joint Section also reviewed its own activities. This study also contains a general review of actions reported during 2017 and 2018, as well as information gathered through the previous voluntary updates on the status of the implementation by the member States in 2014 and 2015.

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The process was coordinated by Ms. Alicja Kacprzak, who also drafted the study. She was supported by Ms. Maike Carstensen. The work was carried out under the direction of Ms. Paola Deda, Chief of the ECE/FAO Forestry and Timber Section and Mr. Ekrem Yazici, Deputy Chief of the ECE/FAO Forestry and Timber Section, and benefited from the guidance of the ECE/FAO Team of Specialists on Forest Policy (Forest Policy Network).

Comments and contributions were received from several countries.

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## BACKGROUND

The Rovaniemi Action Plan for the Forest Sector in a Green Economy (RAP) is a blueprint for a green economy in the forests sector in the ECE Region<sup>1</sup>. It was adopted in Rovaniemi, Finland, by the Joint Session of the ECE Committee on Forests and Forest Industry (COFFI) and the FAO European Forestry Commission (EFC) in 2013. The Plan describes how the forest sector can lead the way towards, and contribute to, a green economy in the ECE Region. It provides concrete actions meant to support and inspire national strategies and activities that enhance the contribution of the forest sector to a green economy. It proposes to achieve its overall goal by 2020.

The mid-term review of the Rovaniemi Action Plan for the Forest Sector in a Green Economy was conducted between March 2017 and March 2018 by the ECE/FAO Forestry and Timber Section. The government of Finland supported the work through the ECE project "Strengthening capacities of the ECE member States to implement the Rovaniemi Action Plan for the Forest Sector in a Green Economy". The work aimed to promote the exchange of knowledge on the status of implementation of the Rovaniemi Action Plan and, more generally, on the contribution of the forest sector to a green economy.

### MANDATE

The Rovaniemi Action Plan proposed to achieve its overall goal, "the greatest possible contribution of the forest sector to the green economy", by 2020. The work on the mid-term review is in line with the RAP's recommendation requesting the Committee and the Commission to "monitor progress of the forest sector towards a green economy and prepare, as a part of its integrated Programme of Work, a report on "The Forest Sector in a Green Economy in the ECE Region".

The need for the mid-term review of the RAP was reiterated by member States in the ECE/FAO Team of Specialists on Forest Policy (Forest Policy Network), which provided guidance to the process. The work on the mid-term review benefitted also from the guidance of the Joint ECE/FAO Working Party on Forest Statistics, Economics and Management.

### METHODOLOGY

The Joint Section invited all stakeholders of the Rovaniemi Action Plan to report about actions they have implemented and are in line with the RAP.

The review process started on 28 March 2017, when the Joint Section presented a proposed approach to the mid-term review work to the Team of Specialists on Forest Policy (Forest Policy Network) during its meeting in Geneva. The proposal involved the preparation of a mid-term review report, which would include a summary of regional progress in the implementation of the RAP. Further to the report, and in order to ensure a wide stakeholder consultation to develop recommendations on the further implementation of the RAP, a workshop was envisaged. In addition, a web-page<sup>2</sup> including information gathered through the mid-term review was developed.

Stakeholders were asked to provide inputs in June 2017. Follow up messages were sent on 15 September and 25 September 2017. Several reminders followed. Inputs were received from Estonia, United Kingdom and the Global Fire Monitoring Center.

From October 2017 to February 2018, the section followed up with individual communications to members of the Team of Specialists and other stakeholders inviting contributions to the mid-term review. As the result, inputs were received from Austria, Poland and USA.

In addition to reaching out to the stakeholders of the Rovaniemi Action Plan to collect information on its implementation, the Joint Section also reviewed its own activities, where the Section was identified as leading actor. The results of this review are included in this report and are available on the ECE/FAO website.

Given the limited number of inputs from stakeholders received by the secretariat, this study contains a general review of actions reported through this reporting cycle, as well as information gathered through the previous voluntary update on the status of the implementation by the member States in 2014, undertaken for the seventy-second Session of the ECE Committee on Forests and Forest Industry. The mid-term review's structure is in line with the RAP pillars.

The workshop on mid-term review (on 13 -14 February 2018, Geneva) focused on priorities for the implementation of the five pillars of the Rovaniemi Action Plan until 2020 and the development of recommendations.

The outcome of the workshop is reflected in this paper and was presented to the fortieth Session of the Joint Working Party on Forest Statistics, Economics and Management for further consideration and guidance on 22 March 2018.

<sup>1</sup> The ECE Region covers 56 countries in Europe, the Caucasus, Central Asia and North America: [http://www.unece.org/oes/member\\_countries/member\\_countries.html](http://www.unece.org/oes/member_countries/member_countries.html)

<sup>2</sup> <http://www.unece.org/forests/greeneconomy.html>







## INTRODUCTION

The Rovaniemi Action Plan for the Forest Sector in a Green Economy (RAP) was developed through a consultative process with the aim to increase the forest sector's contribution to a green economy. The actions of the RAP are organised under five pillars: A. Sustainable Production and Consumption of Forest Products; B. A Low Carbon Forest Sector; C. Decent Green Jobs in the Forest Sector; D. Long Term Provision of Forest Ecosystem Services; and E. Policy Development and Monitoring of the Forest Sector in Relation to a Green Economy.

### RAP AND THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

The green economy provides the means for the achievement of the 2030 Agenda for Sustainable Development through its environmental, social and economic dimensions. The Rovaniemi Action Plan states that "a forest sector which plays a leading role in a green economy is promoting sustainable development, both in the forest sector and outside of it".

Sustainably managed forests, at the core of the Rovaniemi Action Plan, contribute greatly to the achievement of the Sustainable Development Goals (SDGs), in particular they support the implementation of SDG 15 "Life on land" and SDG 6 "Clean water and sanitation". In addition, each of the RAP's thematic pillars supports specific SDGs.

Pillar A on sustainable patterns of production, consumption and trade of forest products contributes to a number of other goals, for instance SDG 3 "Good health and well-being", SDG 8 "Decent work and economic growth", SDG 12 "Responsible consumption and production" and SDG 13 "Climate change".

Pillar B on low carbon forest sector contributes to SDG 7 "Affordable and clean energy", SDG 12 "Responsible consumption and production" and SDG 13 "Climate change".

Pillar C on decent green jobs in the forest sector is of particular relevance to achieving SDG 1 "No poverty", SDG 3 "Good health and well-being", SDG 5 "Gender equality", SDG 8 "Decent work and economic growth", SDG 13 "Climate change" and SDG 15 "Life on land".

As regards Pillar D on a long-term provision of forest ecosystem services, its objectives are aligned with the SDG 3 "Good health and well-being" and SDG 12 "Responsible consumption and production".

### RAP AND THE UNITED NATIONS STRATEGIC PLAN FOR FORESTS 2017-2030

The Rovaniemi Action Plan also supports the achievement of sustainable forest management at the regional level under the six Global Forest Goals of the United Nations Strategic Plan for Forests 2017-2030. Because of the alignment of its five pillars with the principles of sustainable forest management and with the Global Forest Goals, the Rovaniemi Action Plan may serve as a reference framework for the implementation of the Strategic Plan 2017-2030, as well as of Quadrennial Programme of Work of the United Nations Forum on Forests 2017-2020, in the ECE Region.

For instance, the actions under Pillar A on sustainable patterns of production, consumption and trade of forest products contribute to the "enhancement of forest-based economic, social and environmental benefits" listed under the Global Forest Goal 2. These actions also address the need to increase the proportion of forest products from sustainably managed forests reflected in Global Forest Goal 3.

Pillar B on the low carbon forest sector contributes to the "efforts to prevent forest degradation and to address climate change" mentioned in Global Forest Goal 1.

Actions under Pillar C on decent green jobs in the forest sector are aligned with Global Forest Goal 2, which, among others, focuses on "enhancing social benefits of forests", including by improving the livelihoods of forest dependent people.

Pillar D, on the long-term provision of forest ecosystem services, can contribute to the increased efforts to prevent forest degradation mentioned in the Global Forest Goal 1. It can also contribute to Global Forest Goal 3, which focuses on efforts to "increase significantly the area of protected forests worldwide and other areas of sustainably managed forests, as well as the proportion of forest products from sustainably managed forests".

Finally, in Pillar E, a number of references can be found to the cooperation, coordination and governance aspects of the Global Forest Goals 4, 5 and 6.

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## RAP AND THE PARIS AGREEMENT

In the Rovaniemi Action Plan, Pillar B focuses on the low carbon forest sector with the goal to make the best possible contribution to mitigation of and adaptation to climate change. The pillar focuses on the development of strategies for the low carbon forest sector, on the reduction of emissions of greenhouse gasses through substitution of wood for non-renewable materials and energy and on promoting the sequestration of carbon in forest ecosystems and harvested products.

## RAP AND GENDER MAINSTREAMING

In Pillar C, on decent green jobs in the forest sector, some actions make a direct reference to “improving the monitoring and analysis of gender aspects in the forest sector workforce skills analysis”<sup>3</sup> or “streamlining gender aspects into relevant forest policy strategies”<sup>4</sup>. In Pillar E one action is focused on “review of gender aspects of the forest sector in the green economy”.

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<sup>3</sup> RAP Action C.0.2.

<sup>4</sup> RAP Action C.1.1.

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# 1. ACTIVITIES REPORTED BY MEMBER STATES AND OTHER STAKEHOLDERS

In the fall of 2017, the Joint Section collected information from the RAP stakeholders on the activities they undertook which contributed to the implementation of the RAP. This information was complemented by inputs provided by RAP stakeholders in the past, as reported in presentations delivered during meetings of the ECE/FAO Team of Specialists on Forest Policy (Forest Policy Network), the seventy-second Session of the ECE Committee on Forests and Forest Industry in Kazan, Russia in 2014 and a document prepared for “Silva2015” Joint Session of the ECE Committee on Forests and Forest Industry and FAO European Forestry Commission, in Engelberg, Switzerland in 2015<sup>5</sup>.

## PILLAR A. SUSTAINABLE PRODUCTION AND CONSUMPTION OF FOREST PRODUCTS

**Objective A.0:** To develop and communicate realistic and ambitious strategies for sustainable patterns of production, consumption and trade of forest products and the related services.

Implementation of objective A0 was reported by Austria<sup>6</sup>, Estonia<sup>7</sup>, Georgia<sup>8</sup>, Lithuania<sup>9</sup>, Poland<sup>10</sup> and the Russian Federation<sup>11</sup>.

These member States worked on the development and update of national forest programmes and action plans with the aim to enhance sustainable forest management and to increase the demand of forest products from legal sources and stimulate a number of green jobs linked to the forest sector. Countries reported that the adoption of forest programmes and action plans led to additional funding to forest related projects and increased visibility of the forest sector in the context of national sustainable development and green economy strategies.

Some countries reported on additional efforts to promote the use of sustainable forest products, through exchange of knowledge among experts at scientific seminars and conferences (Poland<sup>12</sup>) as well as on the introduction of targeted forest management programmes, for instance for the provision and use of renewable wood energy in order to reduce fossil fuel consumption (Austria<sup>13</sup>). These activities contributed to sustainable production and consumption trends.

**Objective A.1:** To ensure that consumers are fully and accurately informed whether the forest products they purchase come from sustainable sources, and that certification and labelling systems encourage the sound and sustainable use of wood and forest products.

Under this objective, countries gave priority to activities related to the promotion and development of certifications schemes. This was to ensure the provision of forest biomass as a renewable carbon neutral material in a number of applications, as energy source and as a substitute for carbon-intensive building materials. These activities contributed to the lowering of the carbon footprint of the energy and construction sectors.

Member States reported on participating in various certification schemes and on encouraging certification of timber under the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) (Poland<sup>14</sup> and the United Kingdom<sup>15</sup>). In the United States<sup>16</sup>, forest certification was undertaken by the private forest owners under a number of local and international forest certification schemes.

<sup>5</sup> ECE/TIM/2015/INF.3 – FO:EFC/2015/INF.3

<sup>6</sup> Austria (2018), p.1.

<sup>7</sup> Estonia (2017), p.1.

<sup>8</sup> World Bank (2015), p. xiv.

<sup>9</sup> ECE/FAO (2015), p.6.

<sup>10</sup> Poland (2018), p.1.

<sup>11</sup> Alexander Panfilov (2014), p.5.

<sup>12</sup> Poland (2018), p.2.

<sup>13</sup> Federal Ministry of Agriculture, Forestry, Environment and Water Management, Austria (2016), p.15.

<sup>14</sup> Poland (2018) p.3-4.

<sup>15</sup> United Kingdom (2017), p.1.

<sup>16</sup> United States (2018), p.2-3.

Another important issue considered by member States under this objective is the improvement of traceability in the timber value chain. For instance, the Russian Federation<sup>17</sup> reported on the establishment of the Round Wood Act of the Russian Federation Federal Law, 415 dated 28 December 2014, aimed to trace round wood from its harvesting site through transport and sale to the point of processing or export.

**Objective A.2:** To help public and private buyers of forest products to develop and implement procurement rules, which encourage sustainable practices and promote demand for certified forest products.

Member States that reported their activities under this objective worked, among others, on the promotion and implementation of public and private procurement policies, which would “take into account sustainability considerations”<sup>18</sup> of wood sourcing. Specific examples of development or amendment of national public procurement policies were reported by Austria<sup>19</sup>, and Georgia<sup>20</sup>.

**Objective A.3:** To ensure that wood supply from the region’s forests is sufficient to satisfy, on a sustainable basis, society’s needs for renewable raw materials and sources of energy.

Member States that reported their activities under this objective were Estonia<sup>21</sup>, Georgia<sup>22</sup>, Poland<sup>23</sup>, Ukraine<sup>24</sup> and the United States<sup>25</sup>. Poland conveyed that “under the conditions of emerging shortages of wood raw materials, increasing of their supply, while maintaining sustainable forest management, has become extremely important”<sup>26</sup>. Ensuring the sustainability of forests requires constant monitoring and assessment of forest resources and forest conditions. Countries have undertaken national forest inventory assessments to gather information in support of effective forest management and planning of relevant actions. In addition, a number of member States (Austria<sup>27</sup>, Georgia<sup>28</sup>, Lithuania<sup>29</sup> and Poland<sup>30</sup>) reported on carrying out forest inventories in order to “generate information and data to support effective forest planning”<sup>31</sup>.

**Objective A.4:** To promote innovation in forest management and in the production and use of forest products and the related services so that the forest sector is a competitive supplier of renewable and sustainably produced goods and services.

The commitment to continuously improve innovation in the forest sector and its competitiveness in the transition to a green economy was a priority for countries that reported under objective A.4 (Estonia<sup>32</sup>, Georgia<sup>33</sup>, Lithuania<sup>34</sup> and Poland<sup>35</sup>). Their activities are aimed at exchanging experiences and cooperation among all stakeholders, including: science, business and policy-makers. Activities included the creation of research centres; studies on the development of forest products and services and their impact in terms of employment and value added; launching of national programmes for innovation in the forest sector; and participation in international research initiatives.

Countries reported that these various activities increased the awareness on trends in the innovative use of forest biomass, for instance as a substitute to carbon intensive materials in the construction or energy sectors, lowering the carbon footprint, improving environmental quality of modern products and creating a potential for new green jobs.

<sup>17</sup> Alexander Panfilov (2014), p.7.

<sup>18</sup> RAP Action A.2.2.

<sup>19</sup> ECE/FAO (2015), p.3.

<sup>20</sup> ECE/FAO (2015), p.4.

<sup>21</sup> Estonia (2017) p.1.

<sup>22</sup> ECE/FAO (2015), p.4.

<sup>23</sup> Poland (2018) p.4.

<sup>24</sup> ECE/FAO (2015), p.9.

<sup>25</sup> USA (2018) p.1.

<sup>26</sup> Poland (2018) p.4.

<sup>27</sup> Austrian Research Centre for Forests (2017).

<sup>28</sup> ECE/FAO (2015), p.4.

<sup>29</sup> Environmental Protection Agency, Lithuania (2016).

<sup>30</sup> Poland (2018) p.4.

<sup>31</sup> RAP Action A.3.1.

<sup>32</sup> Estonia (2017) p.1.

<sup>33</sup> ECE/FAO (2015), p.4.

<sup>34</sup> ECE/FAO (2015), p.7.

<sup>35</sup> Poland (2018) p.5.



**Objective A.5:** To promote the use of LCA data based on internationally agreed standards for all materials at all stages of manufacturing, use and recycling, to support decision making at all levels.

Only Poland<sup>36</sup> reported on carrying out research on the environmental assessment of the life cycle of wood products using the LCA technique. Poland highlighted the importance of continuous work on this topic, which requires the constant exchange of experience to enhance knowledge in support of decision-making and the integration of the forest sector in the work of international standardisation initiatives such as UNEP/SETAC Life Cycle Initiative or ISO methodologies.

**Objective A.6:** To contribute to the development of green building standards and promote the equitable treatment of all materials in terms of sustainability.

During the course of the implementation of the Rovaniemi Action Plan, no member State or other stakeholder reported on carrying out activities to contribute to the development and implementation of green building standards with impact on use of wood in buildings.

**Objective A.7:** To ensure that only legally produced forest products enter the market.

Austria<sup>37</sup>, Georgia<sup>38</sup>, Poland<sup>39</sup>, the Russian Federation<sup>40</sup> and Ukraine<sup>41</sup> reported on initiatives undertaken under this objective. Poland implemented actions following the guidelines of the EU Timber Regulation<sup>42</sup>.

Illegal logging remains one of the major issues in some parts of the ECE Region. Besides causing environmental damage, it impacts the lives and livelihoods of the poorest people, in particular in rural areas.

## PILLAR B. THE LOW CARBON FOREST SECTOR

**Objective B.0:** To develop and communicate ambitious and realistic strategies for the low carbon forest sector.

Member States that reported on the implementation of this objective (Austria<sup>43</sup>, Poland<sup>44</sup> and the United Kingdom<sup>45</sup>) have incorporated climate change concerns, its possible impacts on the forest sector, and adaptation and mitigation measures in to their national forest programmes.

In addition, Poland noted that the “reduction in greenhouse gas emissions in forestry can be achieved through different methods, for instance by increasing the forest area by afforestation of post-agricultural land, using fast growing species in forest renewal, employing silvicultural methods aimed at increasing standing volume and extending the life of wood products and their recycling”<sup>46</sup>. These methods not only contribute to offset greenhouse gas emissions in the sector but also promote low-carbon activities in the forest sector and thereby ensure its transition to a green economy.

**Objective B.1:** To encourage the reduction of emissions of greenhouse gases by substituting wood from sustainable sources for non-renewable materials and energy.

The Russian Federation<sup>47</sup> reported on the adoption of the “Decree of the President on the Reduction of Greenhouse Gas Emission”, aiming at the reduction of 25 per cent by 2020 if compared to the level of 1990. Poland<sup>48</sup> reported on the development of educational materials to promote the use of wood as a natural and sustainable material.

<sup>36</sup> Poland (2018) p.7.

<sup>37</sup> ECE/FAO (2015), p.3.

<sup>38</sup> ECE/FAO (2015), p.4.

<sup>39</sup> ECE/FAO (2015), p.9.

<sup>40</sup> Alexander Panfilov (2014), p.7.

<sup>41</sup> ECE/FAO (2015), p.9-10.

<sup>42</sup> European Parliament (2010).

<sup>43</sup> Federal Ministry of Agriculture, Forestry, Environment and Water Management, Austria (2016), p.15

<sup>44</sup> Poland (2018), p.7.

<sup>45</sup> United Kingdom (2017), p.1

<sup>46</sup> ECE/FAO (2015), p.14-15.

<sup>47</sup> Alexander Panfilov (2014), p.10.

<sup>48</sup> Poland (2018) p.4.

As regards wood mobilisation and the functioning of the wood energy market, countries have developed methodologies for conducting research on the demand and delivery of firewood to citizens (Georgia<sup>49</sup>). They have also elaborated platforms to exchange information for trade of biofuel products, including wood pellets and wood chips and the promotion of wood energy (e.g. in Lithuania a biomass exchange online platform Baltpool was created).

**Objective B.2:** To promote the most efficient production, processing and use of wood raw material.

One example reported under this objective is a Polish-German project on recycling used wood<sup>50</sup>. The project provided information about experiences of these countries in the application of the principles of cascade wood management in the forest sector.

The project developed a common definition of used wood as well as new sorting techniques for waste wood and a classification of recovered wood assortments. It developed technological guidelines ensuring the rational management of used wood in the production of particleboards for the furniture industry as well as brackets for pallets.

**Objective B.3:** To improve the capacity of the forest sector to adapt to climate change and manage the risks associated with a changing climate.

Several member States (Austria<sup>51</sup>, Poland<sup>52</sup>, Turkey<sup>53</sup> and the United Kingdom<sup>54</sup>) reported on the development of strategies “for the use of forests as tool for the adaptation of society and the environment to climate change”<sup>55</sup> and the “risk management for forests at a national level and by forest region”<sup>56</sup>. They noted that integrating the forest sector into wider cross-sectoral plans to tackle climate change was key to ensure the effectiveness of these plans.

One activity reported under this objective was related to the development of wildfire monitoring and early warning capacities for integrated forest fire management. Extensive reporting on that topic was provided by the Global Fire Management Centre (GFMC)<sup>57</sup>. It illustrated how multiple actors from different disciplines can successfully work on the development of participatory approaches in landscape fire management within international networks.

**Objective B.4:** To promote the sequestration and storage of carbon in forest ecosystems and harvested wood products.

Under this objective, several member States reported monitoring carbon stocks in forests (Georgia<sup>58</sup>, Lithuania<sup>59</sup> and the United States<sup>60</sup>). The United States provided an example on how the forest carbon is tracked in their country through the Forest Carbon Accounting Framework (FCAF). This new framework relies on the US Forest Service’s extensive forest inventory and related information. In the period of 1990-2015, the framework provided useful information, for instance on net forest sequestration per year and on forest area increase, based on the total forest carbon stock change<sup>61</sup>.

## PILLAR C. DECENT GREEN JOBS IN THE FOREST SECTOR

**Objective C.0:** To develop and communicate ambitious and realistic strategies for decent green jobs in the forest sector.

Estonia<sup>62</sup> and Poland<sup>63</sup> reported having undertaken activities in line with a “review of the forest sector workforce, in order to recommend priorities and communicate their importance through stakeholder consultation”<sup>64</sup>. In addition, Poland reported on including gender aspects when addressing forest workforce issues in its National Forest Programme<sup>65</sup>.

<sup>49</sup> ECE/FAO (2015), p.13.

<sup>50</sup> Wood Technology Institute, Poland (2012).

<sup>51</sup> Federal Ministry of Agriculture, Forestry, Environment and Water Management, Austria (2016), p.66

<sup>52</sup> Poland (2018), p.8.

<sup>53</sup> Ministry of Forestry and Water Affairs, Turkey (2011).

<sup>54</sup> United Kingdom (2017), p.1-2.

<sup>55</sup> RAP Action B.3.7.

<sup>56</sup> RAP Action B.3.8.

<sup>57</sup> GFMC/GWFN (2017), p.2-3.

<sup>58</sup> ECE/FAO (2015), p.13.

<sup>59</sup> ECE/FAO (2015), p.14.

<sup>60</sup> United States (2018), p.3.

<sup>61</sup> United States (2018), p.4.

<sup>62</sup> Estonia (2017) p.1-2.

<sup>63</sup> Poland (2018) p. 12.

<sup>64</sup> RAP Action C.0.1.

<sup>65</sup> ECE/FAO (2015), p.21.

**Objective C.1:** To ensure that the workforce has the necessary skills at all levels to carry out the increasingly complex tasks associated with sustainable forest management.

Several member States reported on “investing in education and training in the forest sector”<sup>66</sup>. Activities included: the establishment of a forest education centre (Austria<sup>67</sup>); training courses for private forest owners (Lithuania<sup>68</sup>); establishment of regional information centres for the public (Luxembourg<sup>69</sup>); apprenticeships to encourage the development of a skilled and adaptable workforce and training to improve staff development and capacity within the Forestry Commission (United Kingdom<sup>70</sup>).

The GFMC reported the development of the EuroFire competency standards and training materials for fire management in fire institutions that did not have specialized services<sup>71</sup>.

**Objective C.2:** To reduce the levels of illness and injury experienced at present by the forestry workforce, taking into account the changes in technology and their implications for occupational health and safety due to the transition to the green economy.

Health and safety of the forest workers are major concerns in many countries in the ECE Region even if improvements to work safety were recorded in recent years. The mid-term review of the Rovaniemi Action Plan did not provide much light on activities of member States in this area.

Only Austria reported about some of its activities under this objective<sup>72</sup>. They included enforcing the Workers Protection Act, which is at the basis of work on the safety and health of workers (the amendment to the Act was adopted in 2012), and undertaking two research projects: (i) on the identification of new technologies for avoiding accidents at work in the surroundings of vehicles, machines and devices in agriculture and forestry; and (ii) on exposure of forest workers to vibration caused by forest equipment and machinery.

**Objective C.3:** To review the work methods used for harvesting and silviculture, determine whether they need to be improved and to ensure that best practice is applied everywhere.

Under this objective, several member States reported developing best practices for forest operations. Austria<sup>73</sup> included them in training curricula for foresters. Georgia shared their best practices in sustainable forest management and other silvicultural activities at various regional workshops (for example, under FLEG II programme<sup>74</sup>). Luxembourg promoted certification and collective contracts for forest workers and provided funds to public forest workers for safety clothing and forest machinery<sup>75</sup>. Poland<sup>76</sup> conducted research on (i) possibilities and limits of harvesting in deciduous forests (birch, oak, beech, black alder stands); and (ii) on damages to round wood due to mechanised harvesting.

Activities reported aimed at sharing best practices for environmentally efficient, economically productive and safe forest operations, which are needed for sustainable forest management and supporting the sector’s transition to a green economy.

**Objective C.4:** To promote the use of tools to assess the socio-economic impacts of green economy policies on the forest sector.

Member States or other stakeholders did not provide information on activities in this area.



<sup>66</sup> RAP Action C.1.5.

<sup>67</sup> ECE/FAO (2015), p.19.

<sup>68</sup> ECE/FAO (2015), p.20.

<sup>69</sup> ECE/FAO (2015), p.21.

<sup>70</sup> United Kingdom (2017), p.2.

<sup>71</sup> GFMC/GWFN (2017), p.5.

<sup>72</sup> ECE/FAO (2015), p.19.

<sup>73</sup> ECE/FAO (2015), p.19.

<sup>74</sup> ECE/FAO (2015), p.20.

<sup>75</sup> ECE/FAO (2015), p.20.

<sup>76</sup> ECE/FAO (2015), p.21.

**Objective C.5:** To improve the situation of forestry education and identify present and future requirements for forestry professionals in the region, in order to get well prepared for future and emerging challenges for the sector.

Several member States reported on measures to monitor the situation of forestry education, including the establishment of the National Forestry Education Strategy (Georgia<sup>77</sup>), of the Forestry Training Centre (Austria<sup>78</sup>) and of four regional information centres (Luxembourg<sup>79</sup>).

The Russian Federation<sup>80</sup> reported actions to improve forestry education, which included (i) the promotion of the profession; (ii) the establishment of a National Forest Knowledge Day since 2013; (iii) a contest on “best school forestry unit” (which covers 59 regions); (iv) the International Junior Forest Contest “Podrost”; as well as (v) professional forestry programmes in 47 universities of the country.

An example on the development of new competences needed in the modern European furniture-making industry was reported by Poland<sup>81</sup>. It pertains to the project “Furniture New European Skills 2020”, which includes “the identification of development scenarios for enterprises of the furniture-making industry, the analysis of new skills needed by present and future employees, and the preparation of training modules using an Internet-based platform to improve the acquisition of new competencies in the European furniture-making industry”<sup>82</sup>.

## PILLAR D. LONG TERM PROVISION OF FOREST ECOSYSTEM SERVICES

**Objective D.0:** To develop and communicate ambitious and realistic strategies for the valuation of and payment for forest ecosystem services.

Under this objective, Georgia<sup>83</sup> reported elaborating Guidelines for Eco-Compensation Standards and payment for ecosystem services, including for other-than-timber forest use. The United Kingdom<sup>84</sup> published a set of experimental Natural Capital Accounts for forestry and reviewed evidence on valuing the benefits of forestry to recommend priorities for future research and methodological improvements<sup>85</sup>. Turkey<sup>86</sup> introduced the “Honey Production Forests Action Plan” along with the “Urban Forests Action Plan”. It also conducted studies on bio-valuation and mapping of ecosystem services<sup>87</sup>.

**Objective D.1:** To support the assigning of economic value to non-marketed forest goods and services and to enhance the understanding and recognition of the public goods provided by forests.

Activities under this objective were reported by Austria<sup>88</sup>, Poland<sup>89</sup> and the United Kingdom<sup>90</sup>. These countries conducted research projects on the valuation of forest goods and services and on the incorporation of values of forest ecosystems into national accounting frameworks. The United Kingdom also reported exploring the development of innovative financial mechanisms to finance forest benefits<sup>91</sup> and the development of corporate natural capital accounts for the public forest estate<sup>92</sup>.

Countries noted that there is a need for further cooperation on data collection, dissemination and development of guidance for the valuation of forest ecosystem services in the context of a green economy.

<sup>77</sup> ECE/FAO (2015), p.20.

<sup>78</sup> Austrian Research Centre for Forests (2017).

<sup>79</sup> ECE/FAO (2015), p.21.

<sup>80</sup> ECE/FAO (2015), p.22.

<sup>81</sup> Poland (2018) p.12.

<sup>82</sup> Wood Technology Institute, Poland (2014).

<sup>83</sup> ECE/FAO (2015), p.23.

<sup>84</sup> Forestry Commission, United Kingdom (2017b)

<sup>85</sup> United Kingdom (2017), p.3-4.

<sup>86</sup> ECE/FAO (2015), p.24.

<sup>87</sup> ECE/FAO (2015), p.24.

<sup>88</sup> ECE/FAO (2015), p.23.

<sup>89</sup> ECE/FAO (2015), p.24.

<sup>90</sup> United Kingdom (2017), p.3-4.

<sup>91</sup> Numbers for Good (2017).

<sup>92</sup> Forestry Commission, United Kingdom (2017a)





**Objective D.2:** To promote best practice in the development and implementation of Payment for Ecosystem Services (PES) in order to ensure the continued provision of forest environmental services.

In several member States, PES is a part of national forest programmes. Austria<sup>93</sup> and the United Kingdom<sup>94</sup> reported on activities under this objective (e.g. Austria included PES into its Rural Development Programme and the Austrian Forest Strategy 2020+, the United Kingdom concluded research programmes to fill evidence gaps on PES).

An example on cooperation among forest owners and other stakeholders for the promotion of ecosystem services in forest ecotourism was submitted by Austria<sup>95</sup>.

**Objective D.3:** To review ways in which forests contribute to or endanger human health and well-being, and ascertain whether this information is properly incorporated into policies and practices.

No information on activities of member States or other stakeholders in this area was reported.

## **PILLAR E. POLICY DEVELOPMENT AND MONITORING OF THE FOREST SECTOR IN RELATION TO A GREEN ECONOMY**

**Objective E.0:** To develop and communicate ambitious and realistic strategies for governance and monitoring of the forest sector.

Several member States reported on their activities supporting governance and monitoring of the forest sector. Austria<sup>96</sup> conducted “the national review of the forest sector governance” through the Austrian Forest Dialogue, calling on “all government institutions, public and private interest groups, as well as any individuals interested in forests” to further develop the way in which its forests are managed, in order to be able to reconcile the multiple interests in the use of forests for industry in the future<sup>97</sup>.

The United Kingdom<sup>98</sup> reported on updating the UK Forestry Standard, which defines the approach of the UK government to sustainable forest management and provides a basis for the regulation and monitoring of forest management – including national and international reporting. Poland<sup>99</sup> reported including the requirement for a “review of the forest sector governance” in its National Forest Programme.

**Objective E.1:** To review existing forest sector policy instruments in the light of the requirements of a green economy, and, if necessary, make proposals for a new approach, while improving synergies at the international level.

Under this objective Poland<sup>100</sup> and Austria<sup>101</sup> reported conducting studies at the national level on policy instruments in place and their relevance to a green economy. For instance, Poland<sup>102</sup> published a book on forestry and wood sector in the green economy, where the concept of the green economy was introduced and the role of forests and wood-based industries in building the green economy was discussed. Further studies in Poland<sup>103</sup> concluded that in the economic practice, there is a need for a systemic approach to the implementation of the principles of a green economy. Increasing awareness on the role of forests and wood raw material in a green economy requires continuing research and outreach to the public.

Turkey<sup>104</sup> continues the alignment of its forest sector with the requirements of the green economy. It reported on planning to harmonise national forest regulations with the Rovaniemi Action Plan.

<sup>93</sup> ECE/FAO (2015), p.23.

<sup>94</sup> United Kingdom (2017), p.3.

<sup>95</sup> ECE/FAO (2015), p.23.

<sup>96</sup> RAP Action E.0.2.

<sup>97</sup> Federal Ministry of Sustainability and Tourism, Austria (2016)

<sup>98</sup> United Kingdom (2017), p.4.

<sup>99</sup> ECE/FAO (2015), p.27.

<sup>100</sup> Poland (2018), p.13.

<sup>101</sup> ECE/FAO (2015), p.25.

<sup>102</sup> ECE/FAO (2015), p.27.

<sup>103</sup> Poland (2018), p.13.

<sup>104</sup> ECE/FAO (2015), p.27-28.

**Objective E.2:** To ensure that the forest information available is comprehensive and comparable, structured according to the regional criteria and indicators sets, at the appropriate spatial resolution for decision making, that analysis of the outlook makes it possible to assess the consequences of policy choices, and that policy makers make use of the best available information and analysis.

Activities related to the implementation of objective E.2 include ensuring the availability of information for forest resources assessments, conducting outlook studies as well as developing capacity of member States to produce data and indicators for sustainable forest management and a green economy.

These activities have been assigned to international and regional actors in the ECE Region, such as the ECE/FAO Forestry and Timber Section, Forest Europe, the Montreal Process, the European Forest Institute and others. Their implementation is the result of long-term cooperation among these institutions, including on: The Collaborative Forest Resources Questionnaire, the pan-European reporting process and the State of Europe's Forest, and the Forest Outlook Studies.

**Objective E.3:** To develop an agreed method for assessing sustainable forest management at the international level, based on criteria and indicator sets, and apply this method, to provide policy makers, particularly in the forest sector, with clear information on whether forests are being sustainably managed or not.

Under this objective Poland and Austria reported assessing the sustainability of forest management at the national level. Austria<sup>105</sup> reported that it prepared the "Sustainable Forest Management – Austrian Forest Report 2015", which assesses the sustainability of forest management at the national level. Poland<sup>106</sup> reported that it established 25 promotional forest facilities as part of the State Forests National Forest Holding's policy on the promotion of sustainable forest management.

Activities related to "developing methodologies to assess sustainability of forest management at the international level"<sup>107</sup> and "capacity-building for reporting on sustainable forest management indicators"<sup>108</sup> have been delegated to ECE/FAO Forestry and Timber Section, Forest Europe, Montreal Process, European Forest Institute and other regional actors.

The Joint Section's activities reporting on sustainability of forest management have been reported to member States on a regular basis in line with the Work Areas of the ECE/FAO Integrated Programme of Work 2014 - 2017.

During the mid-term review of RAP no other stakeholders reported on their activities under this objective.

**Objective E.4:** To improve communication with the public and policy makers about the forest sector's actual and potential role in the green economy and facilitate public participation in the debate on the green economy.

Activities under this objective have been assigned mainly to international and regional actors. The Joint Section, being one of them, reported on its activities on a regular basis in line with the Work Areas of the ECE/FAO Integrated Programme of Work 2014 - 2017.

During the mid-term review of RAP no other stakeholders assigned to this objective reported on their activities.

**Objective E.5:** To communicate lessons learned in the forest sector to other sectors, and to learn from other sectors' experience.

Poland<sup>109</sup> and Austria<sup>110</sup> reported on their activities to ensure the participation of forest stakeholders in cross-sectoral processes and initiatives related to the green economy. International stakeholders assigned to this objective provided no feedback on their activities.

The mid-term review of the Rovaniemi Action Plan summarised in this study conducted by the Forestry and Timber Section contributed directly to "monitoring of green economy developments in the ECE Region"<sup>111</sup> under this objective, by collecting information on voluntary contributions and case studies from member States and other relevant stakeholders.

<sup>105</sup> ECE/FAO (2015), p.26.

<sup>106</sup> ECE/FAO (2015), p.27.

<sup>107</sup> RAP Action E.3.1.

<sup>108</sup> RAP Action E.3.4.

<sup>109</sup> ECE/FAO (2015), p.27.

<sup>110</sup> ECE/FAO (2015), p.26.

<sup>111</sup> RAP Action E.5.1.











## 2. ACTIVITIES OF THE ECE/FAO FORESTRY AND TIMBER SECTION SUPPORTING THE IMPLEMENTATION OF THE ROVANIEMI ACTION

The Joint ECE/FAO Forestry and Timber Section has not only been mandated to monitor the voluntary implementation of the RAP, but also to directly contribute to reaching its goal through undertaking various activities. This section offers a brief overview about activities implemented by the Joint Section.

Table 1: Overview of the objectives and possible actions of the RAP

Pillar	Objectives	Objectives the Joint Section contributed to	Possible RAP Actions	Actions the Joint Section contributed to
A: Sustainable production and consumption of forest products	8	7 (87.5%)	36	12 (33.3%)
B: The low carbon forest sector	5	3 (60%)	33	6 (18.2%)
C: Decent green jobs in the forest sector	6	4 (66.6%)	19	6 (31.6%)
D: Long-term provision of Forest Ecosystem Services	4	3 (75%)	15	3 (20%)
E: Policy development and monitoring of the forest sector in relation to a green economy	6	6 (100%)	25	12 (48%)
<b>Total number of objectives and actions</b>	<b>29</b>	<b>23 (79.3%)</b>	<b>128</b>	<b>39 (30.5%)</b>

### THE ROLE OF THE ECE/FAO FORESTRY AND TIMBER SECTION IN SUPPORTING THE IMPLEMENTATION OF THE ROVANIEMI ACTION PLAN

The Joint Section has been supporting the implementation of the RAP in three ways:

1. It promoted the plan during various intergovernmental meetings, panel discussions and workshops.
2. As one of the possible actors, it has implemented the RAP through various activities. Out of a total number of 128 possible RAP actions, ECE/FAO was indicated as lead actor for 30 actions, and for 24 actions as secondary or supporting actor. Through its various activities, the Joint Section addressed 80 per cent, respectively 71 per cent of the actions designated to ECE/FAO as possible actor.
3. Through monitoring the implementation of the RAP.

## OVERVIEW OF THE ECE/FAO FORESTRY AND TIMBER SECTION ACTIVITIES CONTRIBUTING TO THE IMPLEMENTATION OF THE ROVANIEMI ACTION PLAN

The work of the Joint Section that contributed to the implementation of the RAP encompassed 36 different activities (some of them recurring publications, annual meetings or workshop series) as well as the work of various Teams of Specialists. These activities contributed to 39 out of 128 proposed actions (30.5%), or in other words, contributing to achieving 23 out of 29 objectives (79.3%). Overall, the activities by the Joint Section contribute especially to actions under pillar A, C and E, as illustrated in table 1.

The activities of the Joint Section can broadly be grouped into 4 categories (see tables below for a detailed overview):

- **Publications** (14), including recurring publications, **contributed to 27 actions from all five pillars** (A: 8 | B: 5 | C: 4 | D: 4 | E: 6).
- **Intergovernmental meetings, policy and market dialogues** (4), including panels and market discussions at 2 COFFI sessions and 2 joint COFFI/EFC sessions, **contributed to 11 actions with a focus on pillar A and E** (A: 5 | B: 2 | D: 1 | E: 3).
- **Communication activities** (6), including the international Day of Forests or the European Forest Week, **contributed to 4 actions** (A: 2 | B: 1 | E: 1), **whereas the various activities contribute in different ways to reaching the RAP objectives.**
- **Workshops** (14), including workshops under the two UNDA projects “Sustainable Forest Management for Greener Economies in the Caucasus and Central Asia”(2013-2015) and “Accountability Systems for Sustainable Forest Management in the Caucasus and Central Asia” (2016-2019), **contributed to 18 actions under pillars A, C and E, with a strong focus on objectives C.1 and E.2** (A: 4 | C: 6 | D: 2 | E: 8).



## THE CONTRIBUTION OF THE JOINT SECTION TO THE FIVE PILLARS OF THE ROVANIEMI ACTION PLAN

### PILLAR A: SUSTAINABLE PRODUCTION AND CONSUMPTION OF FOREST PRODUCTS

**Goal:** Patterns of production, consumption and trade of forest products are truly sustainable

Objectives Contributed to <b>7 out of 8 (87.5%)</b>		Actions contributed to <b>12 out of 36 (33.3%)</b>	
<b>Activities</b>			
<b>Publications</b>		<ul style="list-style-type: none"> <li>• Forest Products Annual Market Review (FPAMR)</li> <li>• Forest Resource Assessment + Database</li> <li>• Forests in the ECE Region</li> <li>• Promoting sustainable building materials and the implications on the use of wood in buildings</li> <li>• Pilot project on the System for the Evaluation of the Management of Forests (SEMAFOR)</li> </ul>	
<b>Intergovernmental meetings, policy and market dialogues</b>		<ul style="list-style-type: none"> <li>• Committee and Commission session market and other panel discussions</li> <li>• Roundtable on Forest Certification</li> </ul>	
<b>Workshops</b>		<ul style="list-style-type: none"> <li>• More Heat with Less Wood</li> <li>• Forest Products Markets and Forest Sector Workforce in the Balkans</li> <li>• UNDA project "Accountability Systems for Sustainable Forest Management in the Caucasus and Central Asia"</li> <li>• National Wood Resource and Product Balances</li> </ul>	
<b>Communication Activities</b>		<ul style="list-style-type: none"> <li>• International Day of Forests (21 March)</li> <li>• Video "More Heat with Less Wood"</li> </ul>	
<b>Results achieved</b>			

#### The activities by the Joint Section:

- Promoted sustainable consumption of forest products and the related services, showcased and promoted the innovative and efficient use of wood, including fibers, wood as construction material and wood as source of energy.
- Increased awareness of member States and stakeholders about sustainable patterns of production, consumption and trade of forest products.

#### Sample Activity

The Forest Products Annual Market Review (FPAMR) provides general and statistical information on the forest products markets in the ECE Region of Europe, North America and the Commonwealth of Independent States. Thus, it offers information about patterns of production, consumption and trade of forest products and describes the current economic situation. For instance, the FPAMR 2016-2017 reviews some key issues that contribute to a green economy, namely innovation in the sector, forest policies, forest certification and green buildings.

- With regards to innovation, the FPAMR focuses on latest developments contributing to a green economy, such as liquid biofuel, carbon markets or new products made of hardwood cross-laminated timber, glulam and laminated veneer lumber.
- The chapter on forest policy outlines the link between forest products and forest policy. In the context of a green economy, the chapter addresses trade policies, due diligence and legal wood supplies, bioenergy policies, forest certification, climate change and carbon markets, green building, environmental product declarations, and deforestation policies.
- The FPAMR also reports on developments of forest certification. Certified forest products provide consumers with third-party verification that the forest products they purchase conform with commonly held concepts of sustainability and legality. Thus, forest certification is one tool to ensure that raw material is sourced from sustainably managed forests, which may contribute to a green economy.
- On green buildings, the FPAMR highlights that remodelling and new housing construction and sales are essential components of the economy in most countries, which is why much research is directed towards the housing sector. Housing is usually considered a primary indicator and driver of the overall economy, thus plays a key role in driving a green economy.

Overall, the FPAMR outlines latest developments of the forest sector, which allows policy makers and other stakeholders to tailor their activities to making a contribution to a green economy.

#### Activities not addressed so far

Activities of the Joint Section addressed all 11 possible RAP actions designated to ECE/FAO.



## PILLAR B: THE LOW CARBON FOREST SECTOR

**Goal:** The forest sector makes the best possible contribution to mitigation (sequestration, storage and substitution) of, and adaptation to, climate change

Objectives Contributed to **3 out of 5 (60%)**

Actions contributed to **6 out of 33 (18.2%)**

### Activities

#### Publications

- Forest Products Annual Market Review (FPAMR)
- Joint Wood Energy Enquiry + Database
- Forest Resource Assessment + Database
- Promoting sustainable building materials and the implications on the use of wood in buildings
- Wood Energy in the ECE Region

#### Intergovernmental meetings, policy and market dialogues

- Committee and Commission session market and other panel discussions

#### Communication Activities

- International Day of Forests (21 March)
- Video "More Heat with Less Wood"
- Press Releases
- Articles

### Results achieved

#### The activities by the Joint Section:

- Promoted the use of use of low carbon energy and materials over high-carbon/non-renewable alternatives, for example, in buildings, as well as the efficient use of wood energy to make a contribution to climate change.
- Offered a comprehensive overview over the developments in wood energy through publications and collected data of the Joint Wood Energy Enquiry. The bi-annual intervals allowed for monitoring of long-term developments.
- Promoted innovative and traditional use of wood in construction.
- Increased awareness of the relevance of wood energy in the ECE Region and disseminated information about developments in wood energy with regards to the forest and energy sectors.

### Sample Activity

The ECE/FAO Forestry and Timber Section, with the encouragement of the Joint ECE/FAO Working Party on Forest Statistics, and in collaboration with the International Energy Agency (IEA), the Food and Agriculture Organization (FAO) and the European Commission (EC) launched a "Joint Wood Energy Enquiry" in June 2006.

Wood energy data are often scattered or lost within renewable energy statistics, making it difficult to assess and evaluate the real role of wood as a renewable source of energy. The Enquiry aims at improving knowledge and understanding of wood energy consumption and tries to shed light on the potential and future perspective of wood energy in the ECE Region. It collects data of both sources and uses of wood and promotes cooperation between the energy and forest sectors, providing a comprehensive framework on the role of wood energy in member States.

This information promotes the efficient use of wood energy, hence the use of low carbon material. Improved use of wood energy does not only contribute to a low carbon economy, but also strengthens the local economy and creates jobs in rural areas.

### Activities not addressed so far

- B.1.4: [...] Establish targets for the use of wood in construction.
- B.3.1: Bring together science and policy, for instance at a conference on the Adaptation of Forests and Forest Management to Changing Climate in the ECE Region, to review progress since the global conference on the same topic in 2008.
- B.3.2: Promote international cooperation and experience sharing on the development of specific adaptive management regimes.

## PILLAR C: DECENT GREEN JOBS IN THE FOREST SECTOR

**Goal:** The workforce is able to implement sustainable forest management, and the forest sector contributes to achieving the social goals of the green economy by providing decent jobs

Objectives Contributed to **4 out of 6 (66.6%)**

Actions contributed to **6 out of 19 (31.6%)**

### Activities

#### Publications

- Forest Resource Assessment + Database
- Promoting sustainable building materials and the implications on the use of wood in buildings
- Study on Forest Sector Workforce
- Study on Green Jobs in the Forest Sector

#### Workshops

- Contribution to the Forest Europe Workshop on Green Economy and Social Aspects of Sustainable Forest Management
- Forest Products Markets and Forest Sector Workforce in the Balkans
- Threats to sustainability of the Forest Sector Workforce
- Promoting Green Jobs in the Forest Sector

### Results achieved

#### The activities by the Joint Section:

- Provided information and data on forests and forest industry, for example, FRA and pan-European reporting contributed to improve monitoring and analysis of the forest-sector workforce, including gender aspects, occupational safety and health of the forest-sector workforce.
- Highlighted the need for improvement of information related to the social dimension of SFM and provided specific recommendations on each of its aspects.

### Sample Activity

The study on the Forest Sector Workforce (to be published in 2018) was prepared based on the existing data and the overview of literature on the following aspects of the forest sector employment: age, gender, minorities, occupation risks and safety measures, health and well-being of forest workers, organisational and social aspects of the forest work. The study provides a comprehensive overview of different aspects of the forest sector workforce. In this way, the study contributes to sharing information about the forest sector workforce, which may allow for the identification of areas requiring attention of policy maker in order to achieve the social goals of the green economy.

### Activities not addressed so far

- C.1.5: Increase investment in the education and training of contractors, forest workers and forest owners as well as key personnel along the processing stages (operators, engineers, designers, developers, architects etc.).
- C.2.1: Raise the level of political will to improve the safety and health of the workforce, by studying workforce status and trends, with national comparisons, and analysis of the differences.
- C.3.1: Develop and share best practice for environmentally efficient, productive, safe and sustainable forest operations.
- C.3.2: Identify changes in forest operations which might be necessary for sustainable forest management (workshop).
- C.3.3: Review challenges and dilemmas connected to forest operations (reconciling different management goals, mobilizing sufficient operational capacity for sustainable forest management).
- C.4.1: Monitor and analyze at the policy level the impact of green economy policy on employment in the forest sector, possibly with a cross-sectoral approach.
- C.5.2: Monitor the situation of forestry education and stimulate exchange between member States on this matter.

## PILLAR D: LONG TERM PROVISION OF FOREST ECOSYSTEM SERVICES

**Goal:** Forest functions are identified and valued and payments for ecosystem services (PES) are established, encouraging sustainable production and consumption patterns

Objectives Contributed to **3 out of 4 (75%)**

Actions contributed to **3 out of 15 (20%)**

### Activities

#### Publications

- The Value of Forests, Payments for Ecosystem Services in a Green Economy
- Forests and Water: Valuation and Payments for Forest Ecosystem Services + Database

#### Intergovernmental meetings, policy and market dialogues

- Committee and Commission session market and other panel discussions

#### Workshop

- Forests, water and ecosystem services

### Results achieved

#### The activities by the Joint Section:

- Offered insights into and reviewed approaches to the valuation of and payment for ecosystem services schemes, with one focus being forests' hydrological functions.
- Increased awareness about the need to address how to harmonize the methodology and definitions used and which services to be covered.

### Sample Activities

In 2014, the Joint Section, jointly with UNEP, published the study paper "The Value of Forests, Payments for Ecosystem Services in a Green Economy" based on their knowledge on forest ecosystem services and cooperation with other partners.

The study reviews approaches to the valuation of and payment for different forest ecosystem services as it explores the range of forest environment services through fourteen detailed case studies, which examine best practice in promoting PES. Political and public relations implications of PES are discussed at length, and recommendations include the need for clarity about where PES may be a useful tool in moving towards a green economy and where other methods may be more appropriate.

During the Working Party, the secretariat organized a roundtable discussion on "Approaches to the valuation of forest ecosystem services in the ECE Region", contributing to the overall goal of pillar "D" of the Rovaniemi Action Plan that "forest functions are identified and valued and payments for ecosystem services (PES) are established, encouraging sustainable production and consumption patterns".

Approaches to the valuation of and payment for different ecosystem services were shared by member States and stakeholders. The roundtable allowed for thorough discussion on the matter.

Participants of the roundtable found that the value of wood products account for more than 80% of the monetised value generated. The issue of valuing ecosystem services is receiving increasing policy attention. Despite many scientific studies undertaken in the field of valuing ecosystem services, data are often not of sufficient quality of coverage for use in national or international statistics. The roundtable recognized that there are many important values that are not currently incorporated in the valuation system and many challenges remain. Generally, participants stressed the need to discuss how to harmonize the methodology and definitions used and which services to be covered.

### Activities not addressed so far

- D.2.5: Capitalize on success stories for PES in the forest sector and use them to raise public awareness.



## PILLAR E: POLICY DEVELOPMENT AND MONITORING OF THE FOREST SECTOR IN RELATION TO A GREEN ECONOMY

**Goal:** Policies and institutions relevant to the forest sector promote sustainable forest management; policy making is evidence-based, policy instruments are effective, efficient and equitable and monitoring is adequate in order to mainstream the green economy in forest sector policies.

Objectives Contributed to <b>6 out of 6 (100%)</b>		Actions contributed to <b>12 out of 25 (48%)</b>
<b>Activities</b>		
<b>Publications</b>	<ul style="list-style-type: none"> <li>• Forest Resource Assessment + Database</li> <li>• Forests in the ECE Region</li> <li>• Pilot project on the System for the Evaluation of the Management of Forests (SEMAFOR)</li> <li>• Mid-term review of the Rovaniemi Action Plan</li> <li>• Outlook Study</li> </ul>	
<b>Intergovernmental meetings, policy and market dialogues</b>	<ul style="list-style-type: none"> <li>• Committee and Commission session market and other panel discussions</li> <li>• Committee and Commission sessions (Integrated Programme of Work 2014-2017 and Warsaw Integrated Programme of Work 2018-2021)</li> <li>• National Forest Policy Dialogue, Ukraine</li> </ul>	
<b>Workshops</b>	<ul style="list-style-type: none"> <li>• Workshops under the UNDA project "Sustainable Forest Management for Greener Economies in the Caucasus and Central Asia"</li> <li>• Workshop on Forest Products Statistics for National Statistical Correspondents</li> <li>• Capacity-building for national reporting under JFSQ, JWEE, FRA and pan-European reporting</li> <li>• Meetings of the Intersecretariat Working Group on Forest Sector Statistics</li> <li>• Bioenergy from the Forest Sector - Capacity Building for Information</li> <li>• Workshops under the UNDA project "Accountability Systems for Sustainable Forest Management in the Caucasus and Central Asia"</li> <li>• National Wood Resource and Product Balances</li> </ul>	
<b>Communication Activities</b>	<ul style="list-style-type: none"> <li>• International Day of Forests (21 March)</li> <li>• Video "Forests in the ECE Region: Trends and Challenges in Achieving the Global Objectives on Forests"</li> <li>• 3rd European Forest Week (Switzerland, 2015) and</li> <li>• 4th European Forest Week (Poland, 2017)</li> </ul>	
<b>Results achieved</b>		

### The activities by the Joint Section:

- Increased the capacity of national experts to collect and provide usable data for indicators for sustainable management, harvested wood products and wood energy in the ECE Region and increased capacities to implement sustainable forest management, forest protection and to monitor progress in its implementation.
- Included the green economy as one of the main topics of the Integrated Programme of Work 2014-2017 and the Warsaw Integrated Programme of Work 2018-2021.

### Sample Activities

In 2013, the Joint Section launched a two-year capacity-building project on “Sustainable Forest Management for Greener Economies in the Caucasus and Central Asia” to enhance the contribution of the forestry sector to greener economies through sustainable forest management. The project provided training and advisory services to government officials responsible for the forestry sector, to NGOs, academia, private sector and other stakeholders from forest-related sectors.

The project enhanced the capacity of countries in the Caucasus and Central Asia to increase the potential of their forest sector in “greening” the economy. This activity fell under the Work Area 4 “Capacity-Building” as specified in the Integrated Programme of Work 2014-2017.

The UNDA project “Accountability System for Sustainable Forest Management in the Caucasus and Central Asia” supports the development of national forest reporting systems in the CCA. A functioning reporting system for SFM enables countries to monitor progress on SFM and its implementation. This project assists 5 countries to develop such monitoring or reporting systems. The development of monitoring or reporting systems based on the set of criteria and indicators by countries enhances the capacity of countries to implement sustainable forest management, and forest protection and monitor progress in its implementation.

The Joint Section launched a publication on “Forests in the ECE Region: Trends and Challenges in Achieving the Global Objectives on Forests” as a regional contribution to the session of the United Nations Forum on Forests held in May 2015 in New York. The study examines progress of the forest sector in the ECE Region towards the achievement of the four Global Objectives on Forests, adopted by the United Nations General Assembly in 2007. Based on this assessment as well as the forest sector outlooks and policy commitments by ECE member States, thirteen major challenges for the forest sector in the ECE Region are identified and analysed. This allows member States and stakeholders to focus on the challenges related to achieving the Global Objectives on Forests.

The Integrated Programme of Work 2014-2017 includes the green economy related to “Linkages between sustainable forest management and a green economy, including: the contribution of forest products and services to a green economy; decent green jobs and employment in the forest sector” (paragraph 2) and addresses monitoring and assessment of components of priority activities identified in the Rovaniemi Action Plan (paragraph 12). The Warsaw Integrated Programme of Work 2018-2021 encompasses in its scope “The contribution of the forest sector in the transition towards a green economy, forest products and ecosystem services, employment and other socio-economic aspects; including economic viability of the sector” (paragraph 2.1). The green economy is reflected in all 4 Working Areas of both Integrated Programmes of Work.

### Activities not addressed so far

- E.0.5: Review gender aspects of the forest sector in the green economy, starting from the conclusions and recommendations of “Time for action: changing the gender situation in forestry” by the ECE/FAO Team of Specialists on women in forestry, 2006, and develop further actions as appropriate.
- E.1.1: Prepare detailed and objective study at the regional level of policy instruments in place and whether they are appropriate for a green economy, leading, if appropriate to proposals for improvement.
- E.1.3: Create European forest partnership on a voluntary basis to improve coordination and cooperation between international organizations in Europe.
- E.5.4: Establish cross-sectoral working groups, develop contacts with other green economy sectors, and share experience (also international) and identify success factors.







### 3. OUTCOMES OF THE “WORKSHOP ON THE MID-TERM REVIEW OF THE ROVANIEMI ACTION PLAN”

The workshop on the mid-term review of the Rovaniemi Action Plan was held in Geneva on 13-14 February 2018. It reflected the participatory character of the RAP mid-term review process conducted by the Joint Section, under the guidance of the Forest Policy Network. The workshop discussed the status of the mid-term review and identified priorities for the further implementation of the RAP, as well as future direction and future action for the forest sector in a green economy.

The secretariat reported receiving a low number of inputs to the mid-term review. Participants noted that although many of their activities could be considered as contribution to the implementation of the RAP, it was difficult to provide a coherent input to the mid-term review process given the many actors involved at the national level and the lack of a formal reporting mechanism.

Others remarked that although their activities were not initiated to implement the RAP, they were aligned with its objectives and thus supported its implementation. Presentations were delivered by member States (Russian Federation and Poland), the private sector (Sylva Nova), and an NGO (PEFC). In addition, the Joint Section reported on its actives contributing to the implementation of the RAP.

During the interactive group work, participants identified priority actions for the further implementation of the RAP and brainstormed on how the secretariat could support the implementation of the priorities. As a result, a list of priority actions was developed under each pillar.

#### PILLAR A: SUSTAINABLE PRODUCTION AND CONSUMPTION OF FOREST PRODUCTS

**A.0.3.** Promote the use of sustainable forest products (solid, reconstituted, fibre, products of biorefineries) in all sectors

A.3.1 Generate information and data to support effective forest planning, including through national forest inventories

#### PILLAR B: THE LOW CARBON FOREST SECTOR

**B.0.2.** Review consistency of national forest programmes and climate change strategies as regards forest sector contribution to climate change mitigation and adaptation with a view to improving intersectoral communication and cooperation.

**B.1.3** Provide guidelines and recommendations for developing national action plans for energy efficiency and material efficiency in buildings (not only for forest products). EU members will coordinate this work with implementation of EU legislation on energy efficiency.

**B.1.4.** Promote the use of wood in construction. Compare national experiences with the use of different benchmarks, policy measures and legal frameworks. Establish targets for the use of wood in construction.

**B.3.1** Bring together science and policy, for instance at a conference on the Adaptation of Forests and Forest Management to Changing Climate in the ECE region, to review progress since the global conference on the same topic in 2008.

**B.4.2.** Improve national forest inventories and monitoring of carbon stocks in forests and harvested wood products, for instance by developing and/or improving national greenhouse gas inventories, combined with forest inventories.

#### PILLAR C: DECENT GREEN JOBS IN THE FOREST SECTOR

**C.1.3.** Review and discuss the developments of new forest jobs and rural entrepreneurship in the green economy.

**C.3.1.** Develop and share best practice for environmentally efficient, productive, safe and sustainable forest operations.

**C.4.1.** Monitor and analyze at the policy level the impact of green economy policy on employment in the forest sector, possibly with a cross-sectoral approach.

### PILLAR D: LONG TERM PROVISION OF FOREST ECOSYSTEM SERVICES

**D.1.3.** Cooperate with other communities such as health, biodiversity, climate change, energy, agriculture and business, including the insurance sector, to exchange knowledge on valuation methodologies.

**D.2.1.** Review and share experience on payment for forest ecosystem services, notably enabling conditions for PES and monitor progress, taking into account existing material (e.g. Soave 2011) and identifying implications for PES design and implementation.

**D.2.2.** Build capacity at the national level for PES development and implementation and incorporate PES into existing strategies on the basis of experience.

**D.2.4.** Empower forest owners and promote partnerships between forest owners and other actors/stakeholders in developing and providing ecosystem services, for instance forest tourism/ecotourism services.

### PILLAR E: POLICY DEVELOPMENT AND MONITORING OF THE FOREST SECTOR IN RELATION TO A GREEN ECONOMY

**E.0.4.** Develop the capacities (skills, information, institutions, etc.) of all stakeholders (workforce, private sector, administrations, etc.) to implement sustainable forest management, and forest protection and monitor progress in its implementation.

**E.2.2.** Develop the capacity of all countries so that they can make available usable data for all indicators for sustainable forest management.

**E.4.1.** Improve the sector's capacity to communicate, by developing national and international communications, capacities and funding, and sharing experience.

**E.5.4.** Establish cross-sectoral working groups, develop contacts with other green economy sectors, and share experience (also international) and identify success factors.

Participants also identified the Joint Section's role, in supporting the implementation of the RAP, as follows:

1. Disseminating information about the RAP implementation.
2. Building capacity on RAP actions implemented by the Joint Section, promoting their outputs and increasing outreach to stakeholders beyond the usual constituency.
3. Within the UN, engaging in the work of other groups (e.g. the Joint Task Force on Energy Efficiency Standards in Buildings) to develop synergies.
4. Engaging with constituencies and partners outside the forest sector and supporting cross-sectoral cooperation.

Ensuing discussions identified the links between the RAP, the SDGs and the Global Forest Goals, and concluded that most of the RAP objectives are relevant for the forest sector in the long-term, regardless changing global political priorities.

The workshop developed recommendations for future action of the forest sector in a green economy. Participants noted that the Rovaniemi Action Plan is a relevant tool for the forest sector in a green economy and that there is still a need for a guiding tool for the sector "such as the RAP". However, the work on the future tools or initiatives for the sector should:

- Include more actions on the promotion, communication and collaboration with other sectors on substantive topics (e.g. "organisation of a high-level conference (or conference series) on the promotion of the sustainable use of wood (within the context of the SDGs)").
- Have a stronger link to the international political context (e.g. SDGs).
- Be updated to reflect and focus on the latest economic, social and political trends (e.g. employment trends, gender).
- Define clearer reporting procedures.

The outcome of the mid-term review workshop was presented to the Forest Policy Network.









## **4. PRESENTATION OF THE MID-TERM REVIEW OF THE ROVANIEMI ACTION PLAN TO THE JOINT ECE/FAO WORKING PARTY ON FOREST STATISTICS, ECONOMICS AND MANAGEMENT**

The secretariat provided information about the mid-term review of the Rovaniemi Action Plan for the Forest Sector in a Green Economy to the fortieth Session of the Joint ECE/FAO Working Party on Forest Statistics, Economics and Management, which took place in Geneva on 22 March 2018, for its consideration and further guidance. It also presented an overview of the Joint Section's activities contributing to the implementation of the Rovaniemi Action Plan (see Annex).

Ms. Marta Gaworska, leader of the Team of Specialists on Forest Policy (Forest Policy Network) informed the Joint Working Party about the discussion on the mid-term review work held at the meeting of the Forest Policy Network on 14 February 2018. The Forest Policy Network will continue to provide guidance to the secretariat on the mid-term review of the RAP and will assess the pros and cons of possible options on forward for the forest sector in a green economy work, identified by the mid-term review workshop.

The Joint Working Party expressed its appreciation for the work of the Forest Policy Network and the work on the Rovaniemi Action Plan. It stressed the need for further discussion on the future of the Rovaniemi Action Plan and the need to link it with the Sustainable Development Goals.

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## ANNEX ACTIVITIES OF THE ECE/FAO FORESTRY AND TIMBER SECTION SUPPORTING THE IMPLEMENTATION OF THE ROVANIEMI ACTION PLAN FOR THE FOREST SECTOR IN A GREEN ECONOMY

OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED
<b>PILLAR A: SUSTAINABLE PRODUCTION AND CONSUMPTION OF FOREST PRODUCTS</b>				
A.0.2	UNECE/FAO, stakeholders, ARCMED	National Wood Resource and Product Balances workshop, Geneva, December 2017	The balance tool matches roundwood supply with demand. In the case of a shortage (i.e. more demand than supply) this can indicate harvest levels are higher than official figures indicate. If removals are higher this can indicate a challenge to sustainable consumption patterns.  <a href="http://www.unece.org/index.php?id=47616">http://www.unece.org/index.php?id=47616</a>	Increased awareness of tool as a check on official figures.
		Forest Products Annual Market Review (FPAMR) - yearly publication	The FPAMR reviews policies, challenges and opportunities for sustainable consumption patterns for forest products.  <a href="http://www.unece.org/forests/fpamr.html">http://www.unece.org/forests/fpamr.html</a>	Member States and stakeholders were informed about policies, challenges and opportunities for sustainable consumption patterns for forest products.
A.0.3	Private sector, stakeholders, governments, FCN (Forest Communicators Network), ARCMED	International Days of Forests (21 March each year): IDF 2014 "Forest for Fashion", IDF 2015 "Forests for Food – Food for Forests", IDF 2016 "Forests and Water", IDF 2017 "Forests and Energy"	The Forest Communicators Network promoted IDFs. Activities included publications, events, exhibitions and press releases. For instance, on the occasion of the International Day of Forests 2015 "Forests for Food – Food for Forests" the Joint Section organized various events at the Palais in Geneva to promote forest food as sustainable forest product. These events included a press conference, the "Forests for Food – Food for Forests" conference featuring two roundtables, food tastings from the Italian San Francesco's Woodland, the Opening of the "Learning from Forests" Exhibition (20 March -16 April 2015; provided by the Government of Poland) and the Forest Gala Reception with forest food.  <a href="http://www.un.org/en/events/forestsday/events.shtml">http://www.un.org/en/events/forestsday/events.shtml</a> <a href="http://www.unece.org/index.php?id=38454">http://www.unece.org/index.php?id=38454</a>	Promotion and increased awareness throughout UNECE member States about sustainable forest products.
		Workshop "More Heat with Less Wood", 6-7 October 2015, Geneva	The More Heat with Less Wood Workshop facilitated the exchange of experiences throughout the UNECE region on how to improve wood energy applications under given socio-economic conditions. Wood energy projects from different development organizations across Eastern Europe, the Balkans and Central Asia were presented. Good practice wood energy projects for the development of a sustainable and healthy use of firewood in housing was identified and discussed.  <a href="http://www.unece.org/forests/moreheat2015.html#/">http://www.unece.org/forests/moreheat2015.html#/.</a>	Identification of challenges of wood energy in households, guidance for cross-sectoral approaches and support by multilateral organizations for the facilitation of good practice wood energy projects.

A.0.3			Video "More Heat with Less Wood", 2016	The video "More Heat with Less Wood" (2016; over 24,000 views of the versions in English, Albanian, Georgian and Turkish) promotes energy efficiency and wood energy. The short film promotes the efficient use of wood as a fuel in households. Efficient heating technologies, combustion, pyrolysis, thermal insulation, wood storage as well as aspects of consumer health and behaviour of wood use are visualized and explained in an easy to understand manner.  <a href="http://www.unece.org/forests/moreheat2015.html#/">http://www.unece.org/forests/moreheat2015.html#/</a> .	Promotion of the efficient use of wood as a fuel in households.
A.1.1	<b>Maintain monitoring of developments in certification and labelling, preferably with more analysis of the impact of certification and labelling in the marketplace.</b>	<b>UNECE/FAO, EU, certification systems, science</b>	Forest Products Annual Market Review (FPAMR) - yearly publication  Roundtable on Forest Certification at the event "Marianske Lazne +70: Celebrating 70 years of UNECE/FAO cooperation on forests", Marianske Lazne, Czech Republic, 5 - 7 September 2017	Chapter 2 of the FPAMR monitors developments in certification and labelling. <a href="http://www.unece.org/forests/fpamr.html">http://www.unece.org/forests/fpamr.html</a>  The roundtable provided a platform for regional organizations, forest owners, forest-based industries, policymakers, forest certification organizations, NGOs and the private sector in general to discuss the latest trends and developments on forest certification in the ECE region, its future and its complementarity with current legislation, such as the EU Timber Regulation (EUTR) and the US Lacey Act.  <a href="http://www.unece.org/index.php?id=45440">http://www.unece.org/index.php?id=45440</a>	Increased awareness of member States and stakeholders about developments in certification schemes.  Key issues on forest certification were identified and discussed.
A.3.1	<b>Generate information and data to support effective forest planning, including through national forest inventories.</b>	<b>UNECE/FAO, FOREST EUROPE, ITTO (CFRQ initiative), JRC, governments</b>	Implementation of the 10th tranche UNDA project "Accountability Systems for Sustainable Forest Management in the Caucasus and Central Asia"  FRA, pan-European reporting	Supporting the development of national forest reporting systems in the CCA through the UNDA project "Accountability System for Sustainable Forest Management in the Caucasus and Central Asia". This project is implemented between 2016-2019. <a href="http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html">http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html</a>  Through the work on Forest Resource Assessment and the Joint UNECE/FAO/Forest Europe reporting on SFM, the Joint Section contributes to generating information and data required for effective forest planning and national forest inventories.  <a href="http://www.fao.org/forest-resources-assessment/en/">http://www.fao.org/forest-resources-assessment/en/</a> Collected data is available online at: <a href="http://w3.unece.org/PXWeb/en">http://w3.unece.org/PXWeb/en</a>	The 5 project countries (Armenia, Georgia, Kazakhstan, Kyrgyzstan and Uzbekistan) developed a draft criteria and indicator set for sustainable forest management (status 2018).



OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED
A.3.1		Publication SP-37: "Forests in the ECE region: Trends and Challenges in Achieving the Global Objectives on Forests", 2015	The study provided an example of a report, which uses national data for international planning purposes. Using the best available data, the study examined progress of the forest sector in the ECE Region towards the achievement of the four Global Objectives on Forests, adopted by the United Nations General Assembly in 2007. Based on this assessment as well as the forest sector outlooks and policy commitments by ECE member States, thirteen major challenges for the forest sector in the region are identified and analysed. The study provided policy recommendations for consideration in the discussions at UNFF11.  <a href="https://www.unece.org/fileadmin/DAM/timber/publications/forests-in-the-ece-region.pdf">https://www.unece.org/fileadmin/DAM/timber/publications/forests-in-the-ece-region.pdf</a>	The generated information and data supports effective forest planning on a national level.
		Publication DP-66: "Pilot project on the System for the Evaluation of the Management of Forests (SEMAFOR)", 2017	The study provided a tool for the verification of comprehensiveness, completeness and usefulness of collected data. It tested the method through voluntary assessment of the sustainability of forest management in European countries, on the basis of the Pan-European set of criteria and indicators. Scale-neutral indicators were developed and used to describe and assess the situation in 20 participating countries. Thresholds were used for the assessment indicators. The study presented detailed results, by indicator and by country, and discussed the main issues arising from the experience. This activity is experimental in nature, checking and testing the method.  <a href="http://www.unece.org/fileadmin/DAM/timber/publications/DP-66.pdf">http://www.unece.org/fileadmin/DAM/timber/publications/DP-66.pdf</a>	The information about the evaluation system can be used by member States to support effective forest planning.
A.4.1	Private sector, UNECE/FAO	International Day of Forest, e.g. IDF 2014 "Forests for Fashion – Fashion for Forests"	The Joint Section organises annual celebrations of the International Day of Forests on 21 March to demonstrate the contribution of the forest sector to green economy, to promote sustainable forest management practices and to showcase innovative use of wood and forest products. Especially the IDF 2014 under the theme "Forests for Fashion – Fashion for Forests" and the related events organized on the occasion showcased innovative uses of forest products.  <a href="http://www.un.org/en/events/forestsday/events.shtml">http://www.un.org/en/events/forestsday/events.shtml</a> <a href="http://www.unece.org/forests/forestsforfashion.html">http://www.unece.org/forests/forestsforfashion.html</a>	Increased awareness of innovative uses of wood and forests.
		Forest Products Annual Market Review (FPAMR) - yearly publication	Innovative ways to use wood and forest products are also presented in the Forest Products Annual Market Reviews produced by the Joint Section on the yearly basis.  <a href="http://www.unece.org/forests/fpamr.html">http://www.unece.org/forests/fpamr.html</a>	Increased awareness of innovative uses of wood and forest products.

A.4.1			Committee and Commission session market and other panel discussions and exhibitions	<p>Market Discussions, panel discussions and exhibitions that took place during sessions of COFFI and EFC showcased innovative uses of wood and forests, e.g. presentations given during the market discussions at Las2017, including presentations such as “Building Bigger, Taller and Smarter with Wood”, “Linking Global Trends to the Future of Furniture” and “The potential contribution of the forest sector to climate change mitigation”.</p> <p>The 76th session of COFFI to be held in Vancouver, Canada, under the banner “Building the future with wood” will discuss how wood is the material of the future in different construction domains.</p>	Increased awareness of trends in building with wood and trends in wooden furniture as well as about the potential role of the forest sector in mitigating climate change.
A.4.3	<p><b>Review and promote innovation intended to improve efficiency in the use of materials in the manufacturing and processing of forest products, and the competitiveness of the sector.</b></p>	UNECE/FAO	<p>Forest Products Annual Market Review (FPAMR) - yearly publication: Innovation chapters</p> <p>Market Discussions (at Silva2015 and Las2017)</p>	<p>Innovative ways to use wood and forest products are presented in the Forest Products Annual Market Reviews produced by the Joint Section on the yearly basis (for example: FPAMR 2016-2017, chapter 6.7 “Innovation in the sector”).</p> <p><a href="http://www.unece.org/forests/fpamr.html">http://www.unece.org/forests/fpamr.html</a></p> <p>Market Discussions that took place during sessions of COFFI and EFC showcased innovative uses of wood and forests, e.g. presentations given during the market discussions at Las2017, including presentations such as “Building Bigger, Taller and Smarter with Wood” and “Linking Global Trends to the Future of Furniture”.</p> <p>The market discussions at Silva2015 (Engelberg, Switzerland, 2015) focussed on wooden construction, with the views of several experts on the use of hardwood and cross-laminated timber.</p> <p>The 76th session of COFFI to be held in Vancouver, Canada, under the banner “Building the future with wood” will promote innovation in using wood as a material in construction.</p> <p><a href="http://www.unece.org/forests/las2017">http://www.unece.org/forests/las2017</a>  <a href="http://www.unece.org/index.php?id=42383">http://www.unece.org/index.php?id=42383</a></p>	<p>Increased awareness about innovative ways to use wood and forest products.</p> <p>Increased awareness about innovative ways to use wood and forest products.</p>
A.5.1	<p><b>Present and discuss LCA outcomes, starting from the recommendations of the workshop on LCA “the Green Life of Wood” held in October 2012.</b></p>	UNECE/FAO, LCA community, stakeholders	Publication SP-38: “Promoting sustainable building materials and the implications on the use of wood in buildings: A review of leading public policies in Europe and North America”, 2016	<p>The study on “Promoting sustainable building materials and the implications on the use of wood in buildings” produced by the Joint Section monitored and analysed the developments in green building. The study provides an overview of the current policy and regulatory environment regarding sustainable construction materials in the building sector in Europe and North America, and, where applicable, offers a commentary on the effectiveness of such regimes in driving the adoption of wood products. The study’s objective has been to conduct a broad survey across a range of policies, initiatives and programmes in order to document the current circumstances as a starting point for further discussions, technical meetings and policy debates with a view to enhance the use of wood in buildings through policy advice to member States.</p> <p><a href="https://www.unece.org/fileadmin/DAM/timber/publications/SP-38.pdf">https://www.unece.org/fileadmin/DAM/timber/publications/SP-38.pdf</a></p>	Dissemination of information about current policy and regulatory environment regarding sustainable construction materials in the building sector.

OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED
A.6.2	Establish a task force to monitor and analyse developments in green building, in order to bring important trends and issues (e.g. the alleged unfair treatment of forest products) to the attention of policy makers, and monitor whether green building codes, standards and programmes constitute barriers to trade in forest products.	UNECE/FAO, EFI, governments, private sector organisations	Establishment of the Joint Task Force on Energy Efficiency Standards in Buildings  In 2015, the Committee on Sustainable Energy and the Committee on Housing and Land Management endorsed the establishment of a Joint Task Force on Energy Efficiency Standards in Buildings to enhance market harmonization for products and technologies that increase energy efficiency in buildings and support the achievement of the global and regional commitments in the UNECE region. The first meeting of the Joint Task Force took place in Geneva, Switzerland, in October 2017. The meeting's objectives was to operationalize the Task Force and to discuss the approaches and preliminary results of a study on mapping existing energy efficiency standards in buildings in the UNECE region.  <a href="https://www.unece.org/index.php?id=46402">https://www.unece.org/index.php?id=46402</a> Report of the meeting: <a href="https://www.unece.org/fileadmin/DAM/energy/se/pdfs/geee/geee4_Oct2017/Report_of_the_JTF_on_EE_in_buildings_Final.pdf">https://www.unece.org/fileadmin/DAM/energy/se/pdfs/geee/geee4_Oct2017/Report_of_the_JTF_on_EE_in_buildings_Final.pdf</a> .	Establishment of a UNECE task force to monitor and analyse developments in green building.
A.6.4	Inform forest sector stakeholders and stakeholders from other sectors about developments in green building, especially in as much as they affect forest products.	FCN (Forest Communicators Network), FCBA	All COFFI and EFC Sessions between 2014-2017; presentations at other UNECE committee meetings  Discussions during sessions of COFFI and EFC informed forest sector stakeholders and stakeholders from other sectors about developments in green building, such as the presentation on "Building Bigger, Taller and Smarter with Wood", which was given at Las2017 in Warsaw. Regular presentations of the Joint Section in meetings of other UNECE sectoral committees (e.g. Committee on Environmental Policy (CEP), Sustainable Energy, Housing)  <a href="http://www.unece.org/forests/las2017">http://www.unece.org/forests/las2017</a>  Publication SP-38: "Promoting sustainable building materials and the implications on the use of wood in buildings: A review of leading public policies in Europe and North America", 2016  The study on "Promoting sustainable building materials and the implications on the use of wood in buildings" encouraged innovative and traditional wood use in construction and provided an overview on the new developments in green building and how those affect forest products.  <a href="https://www.unece.org/fileadmin/DAM/timber/publications/SP-38.pdf">https://www.unece.org/fileadmin/DAM/timber/publications/SP-38.pdf</a>	Dissemination of information about development in green buildings.  Dissemination of information about development in green buildings.



A.7.1	<b>Exchange national experiences with regulations on illegal logging.</b>	<b>TTF, EFI-FLEGT, governments, TI, FOREST EUROPE, UNECE/FAO</b>	Meeting: Forest Products Markets and Forest Sector Workforce in the Balkans, 8 - 10 December 2015, Podgorica, Montenegro	The workshop brought together 30 experts from the Balkans and Central Asia and Caucasus (UNECE/FAO UNDA project on Sustainable Forest Management for Greener Economies in the Caucasus and Central Asia) to discuss, exchange experiences, map out the needs for capacity building as well as identifying opportunities for improvement by approaching the problems of exploiting harvesting technique, illegal logging, corruption and inefficient wood industries. It was noted that knowledge and experience exchange together with realistic figures of roundwood removals are crucial to address the problem of illegal logging at all levels.  <a href="http://www.unece.org/index.php?id=41338">http://www.unece.org/index.php?id=41338</a>  <a href="http://www.unece.org/info/media/news/forestry-and-timber/2015/western-balkan-countries-call-for-action-to-defeat-illegal-logging/doc.html">http://www.unece.org/info/media/news/forestry-and-timber/2015/western-balkan-countries-call-for-action-to-defeat-illegal-logging/doc.html</a>	National experiences with regulations on illegal logging were exchanged and further exchange encouraged.
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A.7.2	<b>Analyse and monitor the effectiveness and long-term impacts and consequences of the US Lacey Act and EU timber trade regulation on the sector (inside and outside the region), with participation from other regions.</b>	<b>EFI, EU, UNECE COFFI, ITTO, UNFF, TI, JRC, FOREST EUROPE, all UNECE member countries</b>	Forest Products Annual Market Review (FPAMR) 2016-2017	The FPAMR 2016-2017 describes the effectiveness and long term impacts and consequences of the US Lacey Act and EU timber trade regulation on the sector, claiming that the EUTR and the Lacey Act have changed the operating behaviour of timber traders (chapter 1.4 "Forest product trade barriers affecting the UNECE region", chapter 2.2.5 "Due diligence and legal wood supply" and chapter 3.4 "Non-tariff trade restrictions")  <a href="http://www.unece.org/fileadmin/DAM/timber/publications/FPAMR2017AdvanceDraft.pdf">http://www.unece.org/fileadmin/DAM/timber/publications/FPAMR2017AdvanceDraft.pdf</a>	The effectiveness and long-term impacts and consequences of the US Lacey Act and EU timber trade regulation on the sector have been addressed, but not thoroughly analysed or monitored over a long term.
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## PILLAR B. THE LOW CARBON FOREST SECTOR

B.1.2	<b>Continue to monitor developments in wood energy (supply and trade), compare developments with policy targets, put demand for wood energy in the context of overall forest sector trends and potential.</b>	<b>UNECE/FAO (in context of outlook studies)</b>	Joint Wood Energy Enquiry: JWEE 2013 published, JWEE 2015 collected and published	Data collected bi-annually through the Joint Wood Energy Enquiry shows trends in sources and uses of wood energy.  All available data is published here: <a href="https://www.unece.org/forests/jwee.html">https://www.unece.org/forests/jwee.html</a> Summary of the JWEE 2013: <a href="https://www.unece.org/fileadmin/DAM/timber/wood_energy/JWEE2013-info-note.pdf">https://www.unece.org/fileadmin/DAM/timber/wood_energy/JWEE2013-info-note.pdf</a>	The collected data offers a comprehensive overview over the developments in wood energy. The bi-annual intervals allow for monitoring of long-term developments.
			Forest Products Annual Market Review (FPAMR): Wood Energy chapters	The chapters in the Forest Products Annual Market Review continue to monitor developments in wood energy (supply and trade), compare developments with policy targets, put demand for wood energy in the context of overall forest sector trends and potential.  <a href="http://www.unece.org/forests/fpamr.html">http://www.unece.org/forests/fpamr.html</a>	The FPAMR offers a comprehensive overview over the developments in wood energy.

OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED
B.1.2		Publication SP-42: "Wood Energy in the ECE region" (to be published in 2018)	The publication "Wood Energy in the ECE Region: Data, trends and outlook in Europe, the Commonwealth of Independent States and North America" highlights the use and most recent statistics on wood energy markets across the UNECE region. It aims to communicate the relevance of wood energy in the region and help bridge information about the forest and energy sectors. It also intends to offer some of the best-available information on the role that wood energy can play in various sectors to support environmental, energy, and socio-economic strategies toward a greener economy. It focuses on commercial wood energy uses in the UNECE inclusive of energy generated for cooking, heating and electricity generation.	Increased awareness the relevance of wood energy in the region and dissemination of information about developments in wood energy with regards to the forest and energy sectors.
B.1.4	<p><b>Promote the use of wood in construction.</b></p> <p><b>Compare national experiences with the use of different benchmarks, policy measures and legal frameworks.</b></p> <p><b>Establish targets for the use of wood in construction.</b></p>	<p><b>National authorities, architecture and urban planning professional associations, and forest industry. International standardisation bodies. FCBA, UNECE/FAO</b></p>	<p>Publication SP-38: "Promoting sustainable building materials and the implications on the use of wood in buildings", 2016  <a href="https://www.unece.org/fileadmin/DAM/timber/publications/SP-38.pdf">https://www.unece.org/fileadmin/DAM/timber/publications/SP-38.pdf</a></p> <p>Market Discussions at Las2017, the Joint Session of the ECE Committee on Forests and the Forest Industry (COFFI) and the FAO European Forestry Commission (EFC), Warsaw, Poland, 9-13 October 2017  <a href="http://www.unece.org/forests/las2017">http://www.unece.org/forests/las2017</a>  Presentation Slides: <a href="http://www.unece.org/fileadmin/DAM/timber/meetings/20171009/Presentations/Item_2_j_1_Building_Bigger_Taller_and_Smarter_with_Wood_-_Macdonald.pdf">http://www.unece.org/fileadmin/DAM/timber/meetings/20171009/Presentations/Item_2_j_1_Building_Bigger_Taller_and_Smarter_with_Wood_-_Macdonald.pdf</a></p> <p>Market Discussions the 74th session of the ECE Committee on Forests and the Forest Industry (COFFI), Geneva, 18-20 October 2016  A panel discussion on wood construction in the ECE region took place during the 74th session of the ECE Committee on Forests and the Forest Industry (COFFI), which covered obstacles to increasing the use of wood in construction. In order to overcome the mentioned obstacles, it was suggested to: a) enhance the education of architects and engineers on the physical and design properties and use of wood; b) harmonize and update regulations, products standards, and building and fire safety codes; c) improve communication with insurers and financiers about actual risks and cost effectiveness; d) adopt lifecycle analysis of buildings including embodied emissions; e) promote increased public funding for wood construction; f) set up a taskforce to engage with the construction sector to promote wood construction.  <a href="http://www.unece.org/fileadmin/DAM/timber/meetings/20161018/E/ECE_TIM_2016_2_Report_final_5.01.2017.pdf">http://www.unece.org/fileadmin/DAM/timber/meetings/20161018/E/ECE_TIM_2016_2_Report_final_5.01.2017.pdf</a></p>	<p>Promotion of innovative and traditional use of wood in construction.</p> <p>Promotion of the use of wood in construction. Benefits, challenges and opportunities of constructing with wood were highlighted.</p> <p>Identification of challenges to the promotion of building with wood and suggested measures to overcome difficulties.</p>

B.1.7	<p><b>Promote use of low carbon energy and materials over high-carbon/non-renewable alternatives.</b></p>	<p><b>UNEP, UNECE/FAO, FCN (Forest Communicators Network)</b></p>	<p>Promotion of building with wood, and heating with wood through press releases, articles and video.</p>	<p>The use of low carbon energy and materials over high-carbon/non-renewable alternatives, in particular building with wood and heating with wood, has been promoted through communication by the Joint Section. These included press releases (“Wood continues to be the primary source of renewable energy in Europe, 3 March 2016, “UNECE/FAO survey confirms wood as leading source of renewable energy in the UNECE region”, 24 April 2013; “The 21st Century will be the century of wood”, 21 October 2016), articles (“UNECE/FAO discuss wood energy on International Day of Forests”, 2017; “Clean wood energy in households – complex but possible”, 2015; “How to foster the sustainable use of wood energy?”, 2015) as well as the video “More Heat with Less Wood”, 2016.</p> <p>Press releases (“Wood continues to be the primary source of renewable energy in Europe, 3 March 2016, <a href="http://www.unece.org/?id=42348">http://www.unece.org/?id=42348</a>; “UNECE/FAO survey confirms wood as leading source of renewable energy in the UNECE region”, 24 April 2013, <a href="http://www.unece.org/?id=32790">http://www.unece.org/?id=32790</a>; “The 21st Century will be the century of wood”, 21 October 2016, <a href="http://www.unece.org/?id=44135">http://www.unece.org/?id=44135</a>), Articles (“UNECE/FAO discuss wood energy on International Day of Forests”, 2017, <a href="http://www.unece.org/info/media/news/forestry-and-timber/2017/unecefao-discuss-wood-energy-on-international-day-of-forests/doc.html">http://www.unece.org/info/media/news/forestry-and-timber/2017/unecefao-discuss-wood-energy-on-international-day-of-forests/doc.html</a>; “Clean wood energy in households – complex but possible”, 2015, <a href="http://www.unece.org/info/media/news/forestry-and-timber/2015/clean-wood-energy-in-households-complex-but-possible/doc.html">http://www.unece.org/info/media/news/forestry-and-timber/2015/clean-wood-energy-in-households-complex-but-possible/doc.html</a>; “How to foster the sustainable use of wood energy?”, 2015, <a href="http://www.unece.org/info/media/news/forestry-and-timber/2015/more-heat-with-less-wood-how-to-foster-the-sustainable-use-of-wood-energy/doc.html">http://www.unece.org/info/media/news/forestry-and-timber/2015/more-heat-with-less-wood-how-to-foster-the-sustainable-use-of-wood-energy/doc.html</a>) Video “More Heat with Less Wood”, 2016, <a href="http://www.unece.org/forests/moreheat2015.html#/">http://www.unece.org/forests/moreheat2015.html#/.</a></p>	<p>Increased awareness about low carbon energy and materials over high-carbon/non-renewable alternatives especially related to building with wood and heating with wood.</p>
			<p>Publication SP-42: “Wood Energy in the ECE region” (to be published in 2018)</p>	<p>The publication “Wood Energy in the ECE Region: Data, trends and outlook in Europe, the Commonwealth of Independent States and North America” highlights the use and most recent statistics on wood energy markets across the UNECE region. It aims to communicate the relevance of wood energy in the region and help bridge information about the forest and energy sectors. It also intends to offer some of the best-available information on the role that wood energy can play in various sectors to support environmental, energy, and socio-economic strategies toward a greener economy. It focuses on commercial wood energy uses in the UNECE inclusive of energy generated for cooking, heating and electricity generation.</p>	<p>Promotion of wood as low carbon energy option for heating.</p>



OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED
<p><b>B.2.1</b></p> <p><b>Analyse the advantages and disadvantages of the “cascade” approach to wood use.</b></p>	<p><b>UNECE/FAO, EFI, FCBA, LCA community</b></p>	<p>Presentation on “Concept of the cascade use of wood and the related reporting” at COFFI 2014 in Kazan, Russia</p>	<p>The presentation “Concept of the cascade use of wood and the related reporting” highlighted advantages and disadvantages of the “cascade” approach to wood use. It pointed out that a cascade use factor would allow for monitoring progress made by the forest sector towards a green/circular economy and that it is much better than simple ratio of industrial roundwood production/wood fuel production. The cascade use factor is closely tied to wood balances which is a challenge and opportunity for data quality and availability. Such an approach will require cross-sectoral cooperation (country experts, UNECE ToS, etc.).</p> <p><a href="https://www.unece.org/fileadmin/DAM/timber/meetings/20141118/presentations/24-steierer.pdf">https://www.unece.org/fileadmin/DAM/timber/meetings/20141118/presentations/24-steierer.pdf</a></p>	<p>Increased awareness of member States about the advantages and challenges of the “cascade” approach to wood use.</p>
<p><b>B.3.1</b></p> <p><b>Bring together science and policy, for instance at a conference on the Adaptation of Forests and Forest Management to Changing Climate in the ECE region, to review progress since the global conference on the same topic in 2008.</b></p>	<p><b>UNECE/FAO, FOREST EUROPE, EFI, IUFRO</b></p>			
<p><b>B.3.2</b></p> <p><b>Promote international cooperation and experience sharing on the development of specific adaptive management regimes.</b></p>	<p><b>UNECE/FAO, FAO, EFI, IUFRO, governments</b></p>			

B.3.5	<b>Maintain and strengthen wildfire early warning and monitoring capacities, and promotion of integrated fire management approaches, i.e. the targeted extraction of biomass for both renewable energy provision and reduction of wildfire hazard; and the integration of communities / private forest users in the achieving these goals at local level.</b>	<b>FAO, GFMC, EU (JRC), EFI, UNISDR, UNECE/FAO, national fire management bodies</b>	The UNECE/FAO Team of Specialists on Forest Fire	The UNECE/FAO Team of Specialists on Forest Fire was mandated to provide guidance to the UNECE member States on forest fire management and forest fire policies, including governance in bilateral and international cooperation, thus maintaining and strengthening wildfire early warning and monitoring capacities and promoting integrated fire management approaches.  <a href="http://www.fire.uni-freiburg.de/intro/team.html">http://www.fire.uni-freiburg.de/intro/team.html</a>	As the result of the project "Safeguarding Sustainable Forest Management in the UNECE Region through International Cooperation in Fire Management" a draft of the White Paper on "Fire Management Policies and International Cooperation in Fire management in the UNECE Region" and a draft of "Voluntary Guidelines for Fire Aviation" were prepared for further consideration by the GMFC.
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B.4.2	<b>Improve national forest inventories and monitoring of carbon stocks in forests and harvested wood products, for instance by developing and/or improving national greenhouse gas inventories, combined with forest inventories.</b>	<b>Governments, UNFCCC, FRA, UNECE/FAO, FCBA</b>	FRA and pan-European reporting	Through the work on Forest Resource Assessment and the Joint UNECE/FAO/Forest Europe reporting on SFM, the Joint Section contributes to generating information and data on carbon stocks in forests and harvested wood products.  Collected data is available online at: <a href="http://w3.unece.org/PXWeb/en">http://w3.unece.org/PXWeb/en</a>	The generated information and data on carbon stocks in forests and harvested wood products provided by governments contributes to national forest inventories.
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### PILLAR C. DECENT GREEN JOBS IN THE FOREST SECTOR

C.0.1	<b>Review forest sector workforce issues in order to recommend priorities and communicate their importance including through wide stakeholder consultation.</b>	<b>UNECE/FAO, ILO, social partners, NGOs and researchers</b>	Meeting on Forest Products Markets and Forest Sector Workforce in the Balkans, 8 - 10 December 2015, Podgorica, Montenegro	The workshop brought together 30 experts from the Balkans and Central Asia and Caucasus (UNECE/FAO UNDA project on Sustainable Forest Management for Greener Economies in the Caucasus and Central Asia) to discuss, exchange experiences, map out the needs for capacity building as well as formulate recommendations for the future work on forest product markets and forest sector workforce.  <a href="http://www.unece.org/index.php?id=41338">http://www.unece.org/index.php?id=41338</a>	The meeting provided background information for a discussion paper on forest sector workforce in the Balkan region.
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OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED	
C.0.1		Study on Forest Sector Workforce, including gender aspects, age, work safety and economic situation of the forest workers (to be published in 2018)	The study was prepared based on the existing data and the overview of literature in the following aspects of the forest sector employment: age, gender, minorities, occupation risks and safety measures, health and well-being of forest workers, organisational and social aspects of the forest work.	The study provides a comprehensive overview of different aspects of the forest sector workforce.	
		Contribution to the Forest Europe Workshop on Green Economy and Social Aspects of Sustainable Forest Management, 29-30 April 2014, Santander, Spain	The Joint Section actively contributed to the Forest Europe work on green economy and social aspects of sustainable forest management during the workshop (presentation of the RAP and chairing of the Green Jobs thematic session). This covered the implementation of the Rovaniemi Action Plan activities.  <a href="http://www.foresteurope.org/sites/default/files/Concept_note_wge_santander.pdf">http://www.foresteurope.org/sites/default/files/Concept_note_wge_santander.pdf</a> Report from the meeting: <a href="http://www.foresteurope.org/documentos/report_workshop_green_economy.pdf">http://www.foresteurope.org/documentos/report_workshop_green_economy.pdf</a> page 44	The workshop concluded the need for improvement of information related to the social dimension of SFM and provided specific recommendations on each of its aspects.	
C.1.1	<b>Improve monitoring and analysis of the forest-sector workforce, including gender aspects, starting by updating the earlier ECE/FAO/ILO study of professional skills and training.</b>	<b>UNECE/FAO, ILO, Joint Expert Network to implement SFM with stakeholders (ENFE), governments</b>	FRA and pan-European reporting	FRA and pan-European reporting provide regular reporting on forest sector employment and work safety, including gender aspects.	FRA and pan-European reporting contribute to improve monitoring and analysis of the forest-sector workforce, including gender aspects.
			Contribution to the Forest Europe Workshop on Green Economy and Social Aspects of Sustainable Forest Management, 29-30 April 2014, Santander, Spain	The Joint Section actively contributed to the Forest Europe work on green economy and social aspects of sustainable forest management during the workshop (presentation of the RAP and chairing of the Green Jobs thematic session). This covered the implementation of the Rovaniemi Action Plan activities.  <a href="http://www.foresteurope.org/sites/default/files/Concept_note_wge_santander.pdf">http://www.foresteurope.org/sites/default/files/Concept_note_wge_santander.pdf</a> Report from the meeting: <a href="http://www.foresteurope.org/documentos/report_workshop_green_economy.pdf">http://www.foresteurope.org/documentos/report_workshop_green_economy.pdf</a> page 44	The workshop concluded the need for improvement of information related to the social dimension of SFM and provided specific recommendations on each of its aspects.



C.1.2	<p><b>Review and discuss at policy level the main threats to sustainability of the workforce, and possible countermeasures. The review should also include gender aspects.</b></p>	<p><b>UNECE/FAO, ILO, FOREST EUROPE, ENFE, EUSTAFOR, CEPF, governments, other stakeholders</b></p>	<p>Workshop on “Threats to sustainability of the Forest Sector Workforce” organized 17 March 2015 in Geneva, with the support of the ToS on Green Jobs in the Forest Sector</p>	<p>The workshop discussed the challenges of the forest sector workforce and identified its possible countermeasures.</p> <p><a href="http://www.foresteurope.org/sites/default/files/Concept_note_wge_santander.pdf">http://www.foresteurope.org/sites/default/files/Concept_note_wge_santander.pdf</a></p> <p>Report from the meeting:</p> <p><a href="http://www.foresteurope.org/documentos/report_workshop_green_economy.pdf">http://www.foresteurope.org/documentos/report_workshop_green_economy.pdf</a> page 44</p>	<p>The workshop concluded the need for improvement of information related to the social dimension of SFM and provided specific recommendations on each of its aspects.</p>
			<p>Contribution to the Forest Europe Workshop on Green Economy and Social Aspects of Sustainable Forest Management, 29-30 April 2014, Santander, Spain</p>	<p>The Joint Section actively contributed to the Forest Europe work on green economy and social aspects of sustainable forest management during the workshop (presentation of the RAP and chairing of the Green Jobs thematic session). This covered the implementation of the Rovaniemi Action Plan activities.</p> <p><a href="http://www.foresteurope.org/sites/default/files/Concept_note_wge_santander.pdf">http://www.foresteurope.org/sites/default/files/Concept_note_wge_santander.pdf</a></p> <p>Report from the meeting:</p> <p><a href="http://www.foresteurope.org/documentos/report_workshop_green_economy.pdf">http://www.foresteurope.org/documentos/report_workshop_green_economy.pdf</a> page 44</p>	<p>The workshop concluded the need for improvement of information related to the social dimension of SFM and provided specific recommendations on each of its aspects.</p>
			<p>Workshop on “Promoting Green Jobs in the Forest Sector”, organized jointly with Forest Europe on 27-28 June 2017, in Bratislava, Slovakia</p>	<p>The workshop discussed various aspects of employment in the forest sector, including occupational health and safety; education and training system for new skill development; social equity and gender issues; and creating green job opportunities in the forest sector.</p> <p><a href="http://www.unece.org/index.php?id=45487">http://www.unece.org/index.php?id=45487</a></p>	<p>The conclusions from the thematic sessions were published at the UNECE/FAO website and will be feed into the future work of the Joint Section on these topics.</p>
C.1.5	<p><b>Increase investment in the education and training of contractors, forest workers and forest owners as well as key personnel along the processing stages (operators, engineers, designers, developers, architects etc.).</b></p>	<p><b>Governments (labour/training ministries), Joint Expert Network, EFESC, ENFE, other interested parties</b></p>			

OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED	
C.2.1	Raise the level of political will to improve the safety and health of the workforce, by studying workforce status and trends, with national comparisons, and analysis of the differences.	ILO, national occupational safety and health organisations, stakeholders, UNECE/FAO			
C.2.2	Radically improve the monitoring of occupational safety and health of the forestry workforce, to enable meaningful analysis and preventive action, notably by improving monitoring coverage of contractors, farmers, migrant labour, etc. and by putting in place capacity building for improved reporting on social indicators.	UNECE/FAO, ILO, national forest and occupational safety institutions	FRA and pan-European reporting	Through the FRA and pan-European reporting information about occupational safety and health of the forestry workforce is collected and published.	FRA and pan-European reporting contribute to improve monitoring and analysis of occupational safety and health of the forest-sector workforce.
C.3.1	Develop and share best practice for environmentally efficient, productive, safe and sustainable forest operations.	Governments with relevant stakeholders, ILO/ UNECE/FAO Joint Expert Network, ENFE, FCBA			
C.3.2	Identify changes in forest operations which might be necessary for sustainable forest management (workshop).	ILO/UNECE/ FAO Joint Expert Network, with ENFE, ILO, national operations research institutions			

C.3.3	Review challenges and dilemmas connected to forest operations (reconciling different management goals, mobilising sufficient operational capacity for sustainable forest management).	ILO, ILO/UNECE/FAO Joint Expert Network, stakeholders	
C.4.1	Monitor and analyse at the policy level the impact of green economy policy on employment in the forest sector, possibly with a cross-sectoral approach.	ILO, UNECE/FAO, FOREST EUROPE, UNEP	
C.5.1	Review and assess existing curricula or study courses related to forestry professionals within the region and analyze their correspondence to the present and emerging needs of the sector.	Governments, universities, IUFRO, IFSA, Silva Network, sector policy makers, Bologna process, UNECE/FAO, FAO	<p>Study on Green Jobs in the Forest Sector (to be published in 2018)</p> <p>The study Green Jobs in the Forest Sector provides an overview of existing Green Forest Jobs and identifies possible areas for future activities and jobs in the forest sector and may serve as starting point for further analysis and discussion on the future of Green Forest Jobs. It offers a framework for classifying Green Forest Jobs under seven thematic work areas, outlined in the seven main sections of the study, with a particular focus on major trends, needs and challenges as well as opportunities and prospects for the forest sector.</p> <p>Raised awareness about the trends in development of green jobs.</p>
C.5.2	Monitor the situation of forestry education and stimulate exchange between member States on this matter.	Governments, IUFRO, Silva Network, UNECE/FAO, FAO	



OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED
<b>PILLAR D. LONG TERM PROVISION OF FOREST ECOSYSTEM SERVICES</b>				
<b>D.0.1</b>	<b>UNECE/FAO, EFI, FOREST EUROPE, UNEP, JRC, TI</b>	Publication SP-34: "The Value of Forests, Payments for Ecosystem Services in a Green Economy", 2014	In March 2014, the Joint Section, jointly with UNEP, published a study paper number 34: "The Value of Forests, Payments for Ecosystem Services in a Green Economy" based on their knowledge on forest ecosystem services and cooperation with other partners.  <a href="http://www.unece.org/fileadmin/DAM/timber/publications/SP-34Xsmall.pdf">http://www.unece.org/fileadmin/DAM/timber/publications/SP-34Xsmall.pdf</a>	The study reviews approach to the valuation of and payment for different forest ecosystem services as it explores the range of forest environment services through fourteen detailed case studies, which examine best practice in promoting PES. Political and public relations implications of PES are discussed at length, and recommendations include the need for clarity about where PES may be a useful tool in moving towards a green economy and where other methods may be more appropriate.
		Publication: "Forests and Water: Valuation and Payments for Forest Ecosystem Services" (to be published in 2018)	The objectives of this study are to further improve our understanding about the ways in which payments for ecosystem services schemes can be applied to forests, in particular focusing on forests' hydrological functions for the mutual benefit of both humans and the environment. In addition, the study covers advances and challenges facing these schemes and provides practical guidance for policymakers and practitioners.  <a href="http://www.unece.org/forests/areas-of-work/policy-dialogue-and-advice/ecosystem-services.html">http://www.unece.org/forests/areas-of-work/policy-dialogue-and-advice/ecosystem-services.html</a> <a href="http://www.unece.org/forests/areas-of-work/policy-dialogue-and-advice/ecosystem-services/table-of-case-studies.html">http://www.unece.org/forests/areas-of-work/policy-dialogue-and-advice/ecosystem-services/table-of-case-studies.html</a>	The study offers insights into approaches to the valuation of and payment for ecosystem services schemes regarding forests' hydrological functions. The study will be published in 2018.

## D.0.1

Roundtable discussion at the 37th session of the ECE/FAO

Working Party on Forest Statistics, Economics and Management

During the Working Party, the secretariat organized a roundtable discussion on "Approaches to the valuation of forest ecosystem services in the ECE region", contributing to the overall goal of pillar "D" of the Rovaniemi Action Plan that "forest functions are identified and valued and payments for ecosystem services (PES) are established, encouraging sustainable production and consumption patterns". Presentations were made on topics including "Contribution of the Forestry Sector to National Economies", "Valuing forest goods and services in the Pan-European reporting process", "Valuing forest goods and services in the Montreal Process" and "Valuation of forest ecosystem services and development of accounts – The UK Experience".

[http://www.unece.org/fileadmin/DAM/timber/meetings/20150318/ECE\\_TIM\\_EFC\\_WP2\\_2015\\_2-eng.pdf](http://www.unece.org/fileadmin/DAM/timber/meetings/20150318/ECE_TIM_EFC_WP2_2015_2-eng.pdf)

Presentations: <http://www.unece.org/index.php?id=37409>

Approaches to the valuation of and payment for different ecosystem services were shared by member States and stakeholders. The roundtable allowed for thorough discussion on the matter.

Participants of the roundtable found that the value of wood products account for more than 80% of the monetised value generated. The issue of valuing ecosystem services is receiving increasing policy attention. Despite many scientific studies undertaken in the field of valuing ecosystem services, data are often not of sufficient quality of coverage for use in national or international statistics. The roundtable recognized that there are many important values that are not currently incorporated in the valuation system and many challenges remain. Generally, participants stressed the need to discuss how to harmonize the methodology and definitions used and which services to be covered.

Participation in the "National Workshop on Shared Environmental Information Systems (SEIS) and Environmental Statistics for the Sustainable Development Goals (SDGs)", October 2017, Dushanbe, Tajikistan

One of the objectives of the workshop was to build national capacity for the implementation of System of Environmental-Economic Accounting (SEEA) for the forest sector. UNECE/FAO gave a presentation on forest accounting.

Enhanced capacity of member States regarding forest accounting.

OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED	
D.1.1	Intensify research on the valuation of forest goods and services, notably as regards policy objectives, possible funding sources, and the incorporation of values of forest ecosystems into national accounting frameworks. Build databases and online platforms for exchange, cooperation and data dissemination. Develop guidance for the valuation of forest ecosystem services.	Science, EFI, EEA, UNECE/FAO, JRC	Publication: "Forests and Water: Valuation and Payments for Forest Ecosystem Services" (Study to be published in 2018)	The objectives of this study are to further improve our understanding about the ways in which payments for ecosystem services schemes can be applied to forests, in particular focusing on forests' hydrological functions for the mutual benefit of both humans and the environment. In addition, the study covers advances and challenges facing these schemes and provides practical guidance for policymakers and practitioners.  <a href="http://www.unece.org/forests/areas-of-work/policy-dialogue-and-advice/ecosystem-services.html">http://www.unece.org/forests/areas-of-work/policy-dialogue-and-advice/ecosystem-services.html</a> <a href="http://www.unece.org/forests/areas-of-work/policy-dialogue-and-advice/ecosystem-services/table-of-case-studies.html">http://www.unece.org/forests/areas-of-work/policy-dialogue-and-advice/ecosystem-services/table-of-case-studies.html</a>	Research on the valuation of forest goods and services with regards to forests' hydrological functions was intensified. The study will be published in 2018.
			Database under the study	In connection with the Forests and Water study a database has been developed. This database is scheduled for being available online in the first quarter of 2018.	A database was built for data dissemination.
D.2.1	Review and share experience on payment for forest ecosystem services, notably enabling conditions for PES and monitor progress, taking into account existing material (e.g. SoEF 2011) and identifying implications for PES design and implementation.	UNECE/FAO, FOREST EUROPE, EFI, certification systems, research community, EU: multi-level FP7 consortium and regional funds, JRC, ARCMED	Publication SP-34: "The Value of Forests, Payments for Ecosystem Services in a Green Economy", 2014	The study paper "The Value of Forests, Payments for Ecosystem Services in a Green Economy" (May 2014) focusses on conditions for Payments for Ecosystem Services (PES) to exist and on how these conditions currently obtain within the UNECE region. The range of forest environment services is explored through fourteen detailed case studies, which examine best practice in promoting PES. Political and public relations implications of PES are discussed at length, and recommendations include the need for clarity about where PES may be a useful tool in moving towards a green economy and where other methods may be more appropriate. In addition, the paper provides an overview of valuation methods.  <a href="http://www.unece.org/fileadmin/DAM/timber/publications/SP-34Xsmall.pdf">http://www.unece.org/fileadmin/DAM/timber/publications/SP-34Xsmall.pdf</a>  Overview of Examples of Payment Schemes for Forest Ecosystem Services in the UNECE region:  <a href="http://www.unece.org/forests/areas-of-work/policy-dialogue-and-advice/ecosystem-services/table-of-case-studies.html">http://www.unece.org/forests/areas-of-work/policy-dialogue-and-advice/ecosystem-services/table-of-case-studies.html</a>	Review of conditions for Payments for Ecosystem Services (PES) in the UNECE region. Experience of member States are shared through fourteen case studies.



D.2.1			Publication: "Forests and Water: Valuation and Payments for Forest Ecosystem Services" (Study to be released in 2018)	The objectives of this study are to further improve our understanding about the ways in which payments for ecosystem services schemes can be applied to forests, in particular focusing on forests' hydrological functions for the mutual benefit of both humans and the environment. In addition, the study covers advances and challenges facing these schemes and provides practical guidance for policymakers and practitioners.	The study focuses on forests' hydrological functions as one aspect of valuation and payments for forest ecosystem services, identifying and reviewing ways in which payments for ecosystem services schemes can be applied to forests. The study will be published in 2018.
			Pan-European reporting	The pan-European reporting includes regular reporting on ecosystem services.	The pan-European reporting contributes to the review and sharing of experiences on payment for forest ecosystem services and enhances the monitoring of progress.

D.2.5	Capitalize on success stories for PES in the forest sector and use them to raise public awareness.	FCN (Forest Communicators Network), certification systems, stakeholders, ARCMED			
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## PILLAR E. POLICY DEVELOPMENT AND MONITORING OF THE FOREST SECTOR IN RELATION TO A GREEN ECONOMY

E.0.1	Upon request of the country, carry out national forest sector policy reviews, in an international context, with peer review, along the lines of the environmental performance reviews carried out by UNECE.	UNECE/FAO, governments with relevant stakeholder	Contributions to Environmental Performance Reviews	The Joint Section contributed to the Environmental Performance Reviews by carrying out a national forest sector review for Belarus (2016), Georgia (2016), Montenegro (2015) and Serbia (2015). These reviews focused especially on (i) the importance of wood energy for the forest and energy sector; (ii) recorded and unrecorded removals; and (iii) the contribution of the forest sector to the national economy.  <a href="https://www.unece.org/environmental-policy/environmental-performance-reviews/reviewed-countries.html">https://www.unece.org/environmental-policy/environmental-performance-reviews/reviewed-countries.html</a>	Increased capacity of member States to analyze the role of the forest sector in their national economies
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OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED
<p><b>E 0.2.</b></p> <p><b>Review national forest sector governance and the adequacy of available supporting information (when such a review has not been undertaken recently)</b></p>	<p><b>Governments with relevant stakeholder</b></p>	<p>National Forest Policy Dialogue in Kiev, Ukraine, 15 September 2016</p>	<p>Staff of the Joint Section participated in and contributed to the National Forest Dialogue meeting in Kiev, Ukraine, which focused on illegal logging, forest resources assessment and monitoring, and relevant forest policy matters in the country. The main objective of the meeting was to discuss the necessity of the sanitary cuttings in the country as the forestry sector was not successful in convincing society about the necessity of sanitary cuttings. About 50 participants from state forest resources agencies, NGOs, academia and research institutions together with UNECE/FAO staff and representatives of Poland and Belarus discussed the all aspects of sanitary cuttings. Ukraine, Poland and Belarus representatives presented their country reports about sanitary cuttings.</p>	<p>The National Forest Policy Dialogue offered an opportunity to review national forest sector governance in Ukraine and exchange experiences with sanitary cuttings with representatives from Poland and Belarus, who also attended the meeting. The workshop discussed all aspects of sanitary cuttings in Ukraine and concluded that (i) the sanitary condition of Ukrainian forests has a tendency to deteriorate due to complications of climatic conditions and the increasing level of outbreaks of pests and diseases; (ii) recently the capacity of forest enterprises for sanitary cutting is beyond the volume planned; and (iii) there is an urgent need to improve early diagnosis of diseases.</p>
<p><b>E.0.4</b></p> <p><b>Develop the capacities (skills, information, institutions, etc.) of all stakeholders (workforce, private sector, administrations, etc.) to implement sustainable forest management, and forest protection and monitor progress in its implementation.</b></p>	<p><b>Governments, stakeholders, public private partnerships, UNECE/FAO</b></p>	<p>Supporting the development of national forest reporting systems in the CCA through the UNDA project "Accountability System for Sustainable Forest Management in the Caucasus and Central Asia"</p>	<p>A functioning reporting system for SFM enables countries to monitor progress on SFM and its implementation. This project assists 5 countries to develop such monitoring or reporting systems.</p> <p><a href="http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html">http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html</a></p>	<p>The development of monitoring or reporting systems based on the set of criteria and indicators by countries enhances the capacity of countries to implement sustainable forest management, and forest protection and monitor progress in its implementation.</p>

E.0.4			<p>8th tranche UNDA project "Sustainable Forest Management for Greener Economies in the Caucasus and Central Asia" (2013-2015)</p>	<p>In 2013, the Joint Section launched a two-year capacity-building project on "Sustainable Forest Management for Greener Economies in the Caucasus and Central Asia" to enhance the contribution of the forestry sector to greener economies through sustainable forest management. The project provided training and advisory services to government officials responsible for the forestry sector, to NGOs, academia, private sector and other stakeholders from forest-related sectors.</p> <p><a href="http://www.unece.org/forests/capacitybuilding.html">http://www.unece.org/forests/capacitybuilding.html</a></p>	<p>Development of the capacities of countries in the Caucasus and Central Asia to implement sustainable forest management, and forest protection and monitor progress in its implementation.</p>
			<p>Capacity building for national reporting under:</p> <ul style="list-style-type: none"> <li>- JFSQ</li> <li>- JWEE</li> <li>- FRA and pan-European reporting</li> </ul>	<p>The Joint Section's capacity-building activities on Forests, Forest Products and Wood Energy data develop the capacities of all national experts to collect and provide usable data for indicators for sustainable management, harvested wood products and wood energy in the UNECE region.</p>	<p>Increased capacities to implement sustainable forest management, and forest protection and monitor progress in its implementation.</p>
			<p>Publication DP-66: "Pilot project on the System for the Evaluation of the Management of Forests (SEMAFOR)", 2017</p>	<p>The SEMAFOR study is a pilot tool to monitor the implementation of SFM.</p> <p><a href="http://www.unece.org/fileadmin/DAM/timber/publications/DP-66.pdf">http://www.unece.org/fileadmin/DAM/timber/publications/DP-66.pdf</a></p>	<p>The SEMAFOR study makes a contribution to developing the capacities to implement sustainable forest management, and forest protection and monitor progress in its implementation.</p>
E.0.5	<p><b>Review gender aspects of the forest sector in the green economy, starting from the conclusions and recommendations of "Time for action: changing the gender situation in forestry" by the ECE/FAO team of specialists on women in forestry, 2006, and develop further actions as appropriate.</b></p>	<p><b>Governments, civil society, UNECE/FAO, FAO</b></p>			



OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED	
E.1.1	Prepare detailed and objective study at the regional level of policy instruments in place and whether they are appropriate for a green economy, leading, if appropriate to proposals for improvement.	UNECE/FAO, FOREST EUROPE, EFI, ILO with other IGO, JRC			
E.1.2	Include the green economy as one of the main topics of programmes of work.	UNECE/FAO, relevant forest sector organisations and institutions, JRC	<p>8th tranche UNDA project "Sustainable Forest Management for Greener Economies in the Caucasus and Central Asia" (2013-2015)</p> <p>Integrated Programme of Work 2014-2017 and Warsaw Integrated Programme of Work 2018-2021</p>	<p>This capacity building project (2013-2015) focussed to increase the potential of the forest sector in "greening" the economy in seven countries in the Caucasus and Central Asia. The project provided training and advisory services for government officials who deal with forestry, as well as other stakeholders who are influenced by forest policies and forests.</p> <p><a href="http://www.unece.org/forests/capacitybuilding.html">http://www.unece.org/forests/capacitybuilding.html</a></p> <p>The Integrated Programme of Work 2014-2017 includes the green economy related to "Linkages between sustainable forest management and a green economy, including: the contribution of forest products and services to a green economy; decent green jobs and employment in the forest sector" (paragraph 2) and addresses monitoring and assessment of components of priority activities identified in the Rovaniemi Action Plan (paragraph 12). The Warsaw Integrated Programme of Work 2018-2021 encompasses in its scope "The contribution of the forest sector in the transition towards a green economy, forest products and ecosystem services, employment and other socio-economic aspects; including economic viability of the sector" (paragraph 2.1). The green economy is reflected in all 4 Working Areas of both Integrated Programmes of Work.</p> <p><a href="http://www.unece.org/forests/ipow.html">http://www.unece.org/forests/ipow.html</a></p>	<p>The project enhanced the capacity of countries in the Caucasus and Central Asia to increase the potential of their forest sector in "greening" the economy. This activity fell under the Work Area 4 "Capacity-Building" as specified in the Integrated Programme of Work 2014-2017.</p> <p>Inclusion of the green economy as one of the main topics of the Integrated Programme of Work 2014-2017 and the Warsaw Integrated Programme of Work 2018-2021.</p>

E.1.3	<b>Create European forest partnership on a voluntary basis to improve coordination and cooperation between international organisations in Europe.</b>	<b>UNECE/FAO, FOREST EUROPE, EU agencies, EFI, with other agencies, JRC, ARCMED</b>	Brainstorming on ways to “Create a European forest partnership on a voluntary basis to improve coordination and cooperation between international organisations in Europe”	This action is planned to be discussed on 14 February 2018 at the meeting of the ToS on Forest Policy.	No actions taken / implemented at this stage (January 2018).
E.2.1	<b>Maintain and develop present inter-organisation cooperation on forest resource assessment (CFRQ), State of Europe’s Forests (SoEF) and forest sector outlook studies, set up appropriate task forces to address the challenges in measuring particular indicators.</b>	<b>UNECE/FAO (notably teams on Monitoring of SFM and on Outlook), FOREST EUROPE, Montréal Process, TI, JRC, partners for SoEF and the outlook studies</b>	FRA-CFRQ, pan-European reporting  Outlook Study	The Joint Section developed and maintained inter-organisational cooperation on forest resource assessment through the preparation of the Collaborative Forest Resource Questionnaire and the pan-European reporting process.  The Outlook Team met on several occasions, including a session in Russia to review methodologies, exchange national experiences and discuss possible policy questions to be covered by future studies.	Inter-organisation cooperation on forest resource assessment is maintained.  The mandate of the Team of Specialists on Outlook has been re-established in December 2017. The team engages in addressing the challenges in measuring particular indicators measuring forest sector outlook.
E.2.2	<b>Develop the capacity of all countries so that they can make available usable data for all indicators for sustainable forest management.</b>	<b>Governments, UNECE/FAO, international Criteria and Indicators partners, JRC</b>	Supporting the development of national forest reporting systems in the CCA through the UNDA project “Accountability System for Sustainable Forest Management in the Caucasus and Central Asia”	A functioning reporting system for SFM enables countries to deliver data on SFM and its implementation. This project assists 5 countries to develop such monitoring or reporting systems.  <a href="http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html">http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html</a>	Enhanced capacity of 5 countries to make available usable data for all indicators for sustainable forest management through the development of criteria and indicators.

OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED
E.2.2		The Joint Section's capacity-building activities on Forests, Forest Products and Wood Energy data	<p>The Joint Section's capacity-building activities on Forests, Forest Products and Wood Energy data are intended, inter alia, to develop the capacities of all stakeholders to provide usable data for indicators for sustainable management and use of forests in the UNECE region. Workshops on specific topics included:</p> <ul style="list-style-type: none"> <li>- National Wood Resource and Product Balances workshop (5 - 6 December 2017), Switzerland, Geneva</li> <li>- Workshop on Bioenergy from the Forest Sector - Capacity Building for Information (6 - 8 December 2016), Hungary, Budapest</li> <li>- 29th Intersecretariat Working Group on Forest Sector Statistics (9 - 10 February 2016), Switzerland, Geneva</li> <li>- 28th Intersecretariat Meeting on Forest Sector Statistics (27 - 29 January 2015), Yokohama, Japan</li> <li>- Workshop on Forest Products Statistics for National Statistical Correspondents (27 - 28 May 2014), International Agricultural Training Centre, Ankara, Turkey</li> </ul> <p>For a list of all meetings, please visit: <a href="https://www.unece.org/forests/forestsmeetings.html#/">https://www.unece.org/forests/forestsmeetings.html#/</a></p>	Increased capacity of all countries to make available usable data for all indicators for sustainable forest management.
E.2.3	<b>FOREST EUROPE, Montréal Process, UNECE/FAO, EFI, UNEP JRC</b>	Background paper on measuring progress of the forest sector towards a Green Economy	<p>During Metsä2013, the joint session of COFFI and ECE that took place in Rovaniemi, Finland, a roundtable launched an initiative to develop of a green economy indicator data sets. Such a set was supposed to highlight the contribution of the forest sector to a green economy. On this occasion, a background paper entitled "Measuring progress of the forest sector towards a Green Economy: some proposals" provided considerations about the development of indicators to measure progress in this field and proposed six main areas of measurement as well as possible indicators to measure the progress of the forest sector towards a green economy.</p> <p><a href="https://www.unece.org/fileadmin/DAM/timber/meetings/20131209/forest-sector-in-green-economy-indicators.pdf">https://www.unece.org/fileadmin/DAM/timber/meetings/20131209/forest-sector-in-green-economy-indicators.pdf</a></p>	Proposal for the development of the green economy indicator data sets.



E.2.3	<p>- update indicators and develop new ones whenever appropriate</p> <p>- ensure that forest sector indicators for green economy monitoring are consistent with other forest sector indicators, notably those for sustainable forest management.</p>		<p>Workshop: "Measuring the Value of Forests in a Green Economy" (Geneva, 21 October 2016)</p> <p>Implementation of the 10th branch UNDA project "Accountability Systems for Sustainable Forest Management in the Caucasus and Central Asia"</p>	<p>The workshop was addressed to experts from the forest sector and economists working on green growth and green economy. It took stock of internationally developed natural capital and ecosystem services valuation methodologies and assessment methodologies to measure progress in the transition to an inclusive green economy and discussed synergies between green economy and forest sector assessment methodologies.</p> <p><a href="http://www.unece.org/index.php?id=42822">http://www.unece.org/index.php?id=42822</a> Background document: <a href="http://www.unece.org/fileadmin/DAM/timber/meetings/20161021/Measuring_the_value_of_forests_in_a_green_economy.pdf">http://www.unece.org/fileadmin/DAM/timber/meetings/20161021/Measuring_the_value_of_forests_in_a_green_economy.pdf</a> The conclusions from the workshop were included in the report of the workshop: <a href="http://www.unece.org/fileadmin/DAM/timber/meetings/20161021/Workshop_report_-_Measuring_the_value_of_forests_in_a_green_economy.pdf">http://www.unece.org/fileadmin/DAM/timber/meetings/20161021/Workshop_report_-_Measuring_the_value_of_forests_in_a_green_economy.pdf</a></p> <p>Supporting the development of national forest reporting systems in the CCA through the UNDA project "Accountability System for Sustainable Forest Management in the Caucasus and Central Asia". This project is implemented between 2016-2019.</p> <p><a href="http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html">http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html</a></p>	<p>The workshop considered itself the first step on the way to further work and asked the governing bodies of all the organisations who participated in the discussion (UNECE, FAO, OECD, UNEP, World Bank, GGKP) to draw a road map and to engage in the further joint work on the discussed topic. The conclusions from the workshop will be used for further work of the Joint Section on this topic.</p> <p>The 5 project countries (Armenia, Georgia, Kazakhstan, Kyrgyzstan and Uzbekistan) developed a draft criteria and indicator set for sustainable forest management (status 2018).</p>
E.2.4	<p>Produce regular fact-based reports on sustainable forest management in countries, based on international and national criteria and indicators.</p>	<p>Governments, stakeholders, EFI, UNECE/FAO, JRC</p>	<p>Publication SP-37: "Forests in the ECE region: Trends and Challenges in Achieving the Global Objectives on Forests", 2015</p>	<p>The Joint Section launched a publication on "Forests in the ECE region: Trends and Challenges in Achieving the Global Objectives on Forests" as a regional contribution to the session of the United Nations Forum on Forests held in May 2015 in New York.</p> <p>The study examines progress of the forest sector in the ECE Region towards the achievement of the four Global Objectives on Forests, adopted by the United Nations General Assembly in 2007. On the basis of this assessment as well as the forest sector outlooks and policy commitments by ECE member States, thirteen major challenges for the forest sector in the region are identified and analysed. The study provides policy recommendations for consideration in the discussions at UNFF11.</p> <p><a href="https://www.unece.org/fileadmin/DAM/timber/publications/forests-in-the-ece-region.pdf">https://www.unece.org/fileadmin/DAM/timber/publications/forests-in-the-ece-region.pdf</a></p>	<p>A fact-based report on sustainable forest management in countries which examines the progress of the forest sector in the ECE Region towards the achievement of the four Global Objectives on Forests.</p>

OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED
E.2.4		Implementation of the 10th branch UNDA project "Accountability Systems for Sustainable Forest Management in the Caucasus and Central Asia".	Supporting the development of national forest reporting systems in the CCA through the UNDA project "Accountability System for Sustainable Forest Management in the Caucasus and Central Asia". This project is implemented between 2016-2019.  <a href="http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html">http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html</a>	The 5 project countries (Armenia, Georgia, Kazakhstan, Kyrgyzstan and Uzbekistan) developed a draft criteria and indicator set for sustainable forest management (status 2018).
		FRA and State of Europe's Forests (with Forest Europe and FAO)	The Joint Section cooperates with Forest Europe and FAO in producing regular fact-based reports on sustainable forest management in countries, based on jointly collected data, including Forest Resource Assessment (FRA) and the publication the "State of Europe's Forests".	Regular fact-based reports.
E.3.1	<b>Develop an agreed methodology to assess the sustainability of forest management, possibly building on SoEF 2011 experience, as well as the experience of other processes, and implement it.</b>	<b>UNECE/FAO, science, SoEF partners, Montréal Process, JRC, EU</b>	Publication DP-66: "Pilot project on the System for the Evaluation of the Management of Forests (SEMAFOR)", 2017  <a href="https://www.unece.org/fileadmin/DAM/timber/publications/DP-66.pdf">https://www.unece.org/fileadmin/DAM/timber/publications/DP-66.pdf</a>	UNECE and FAO together with the national and international experts and the Team of Specialists on Sustainable Forest Management developed and tested a new methodology to assess the sustainability of forest management in the UNECE region, which is the System for the Evaluation of the Management of Forests (SEMAFOR).  Pilot phase of the agreed methodology to assess the sustainability of forest management.
E.3.2	<b>Encourage cooperation between FOREST EUROPE and the Montréal Process.</b>	<b>FOREST EUROPE, Montréal Process, UNECE/FAO, FAO/FRA, Governments</b>	Implementation of the 10th branch UNDA project "Accountability Systems for Sustainable Forest Management in the Caucasus and Central Asia"  <a href="http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html">http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html</a>	FOREST EUROPE and the Montréal Process took part in the project's activities and shared information about their C&I systems.  Both Processes were represented at meetings of the project and assisted project countries (Armenia, Georgia, Kazakhstan, Kyrgyzstan and Uzbekistan) with the development of their own C&I for SFM sets.
		Activities of the Team of Specialists on Monitoring Sustainable Forest Management	FOREST EUROPE and the Montréal Process took part in the Team's activities and exchanged information about their work.  <a href="https://www.unece.org/forests/fr/msfm.html">https://www.unece.org/forests/fr/msfm.html</a>	FOREST EUROPE and the Montréal Process cooperated with the Joint Section within the work of the Team of Specialists on Monitoring Sustainable Forest Management.

E.3.4	<b>Develop capacity for reporting on indicators of sustainable forest management, at national and international level.</b>	<b>UNECE/FAO, FOREST EUROPE, EFI (incl. its project on implementation of criteria and indicators), JRC</b>	Implementation of the 10th branch UNDA project "Accountability Systems for Sustainable Forest Management in the Caucasus and Central Asia"	Supporting the development of national forest reporting systems in the CCA through the UNDA project "Accountability System for Sustainable Forest Management in the Caucasus and Central Asia". This project is implemented between 2016-2019. <a href="http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html">http://www.unece.org/forests/areas-of-work/capacity-building/unda2016-2019.html</a>	The 5 project countries (Armenia, Georgia, Kazakhstan, Kyrgyzstan and Uzbekistan) developed a draft criteria and indicator set for sustainable forest management (status 2018).
			Regular reporting and capacity-building activities on Forests, Forest Products and Wood Energy data	The Joint Section's regular work and capacity-building activities on Forests, Forest Products and Wood Energy data developed the capacities of all stakeholders to provide usable data for indicators for sustainable management and use of forests in the UNECE region. This included the 2014 JFSQ workshop and the 2016 JWEE workshop as well as meetings listed under E.2.2.  For a list of all meetings, please visit: <a href="https://www.unece.org/forests/forestsmeetings.html#/">https://www.unece.org/forests/forestsmeetings.html#/</a>	Increased capacity to provide data for indicators for sustainable forest management and use of forests in the UNECE region, at national and international level.
E.4.1	<b>Improve the sector's capacity to communicate, by developing national and international communications, capacities and funding, and sharing experience.</b>	<b>UNECE/FAO, FCN, FOREST EUROPE, Montréal Process with other agencies</b>	Activities by the Forest Communicators' Network	Activities undertaken by the Forest Communicators' Network contribute directly to improving the ability of the sector to effectively communicate by developing national and international communication capacities and sharing experience. Such activities included the promotion of the 3rd and 4th European Forest Week (Switzerland in 2015; Poland in 2017).  <a href="http://www.fao.org/about/meetings/european-forest-week/previous-years/2015/en/">http://www.fao.org/about/meetings/european-forest-week/previous-years/2015/en/</a> <a href="http://www.fao.org/about/meetings/european-forest-week/en/">http://www.fao.org/about/meetings/european-forest-week/en/</a>	Increased capacity to communicate through activities including IDFs, EFWs, exhibitions, campaigns, social media outreach.
			International Day of Forests (21 March each year): IDF 2014 "Forest for Fashion", IDF 2015 "Forests for Food – Food for Forests", IDF 2016 "Forests and Water", IDF 2017 "Forests and Energy".	Communication activities organized by the Joint Section for the celebration of the International Day of Forests on 21 March contribute to improving the sector's communication capacity.  <a href="http://www.un.org/en/events/forestsday/events.shtml">http://www.un.org/en/events/forestsday/events.shtml</a>	Increased capacity to communicate through activities including IDFs, EFWs, exhibitions, campaigns, social media outreach.
			Video "Forests in the ECE Region: Trends and Challenges in Achieving the Global Objectives on Forests", 2015	The video "Forests in the ECE Region" provides information about challenges to achieving the Global Objectives on Forests as well as data about forests in the ECE Region and presents environmental benefits of forests.  <a href="https://www.youtube.com/watch?v=eTq-PsIPk8o">https://www.youtube.com/watch?v=eTq-PsIPk8o</a>	Increased capacity to communicate through audio-visual material.



OBJECTIVE	ACTORS	ACTION	DESCRIPTION / SOURCE OF INFORMATION	RESULTS ACHIEVED
<p><b>E.4.2</b></p> <p><b>Implement communications that will result in public opinion and legislators considering wood to be an “ecologically, economically, and technically preferred” construction material and make the best use of the Strategic Framework for Forest Communication in Europe to this end.</b></p>	<p><b>UNECE/FAO, FCN, FOREST EUROPE, Montréal Process, relevant national actors, ARCMED</b></p>	<p>Publication SP-38: “Promoting sustainable building materials and the implications on the use of wood in buildings”, 2016</p>	<p>This study provides an overview of the current policy and regulatory environment regarding sustainable construction materials in the building sector in Europe and North America, and, where applicable, offers a commentary on the effectiveness of such regimes in driving the adoption of wood products. The study’s objective has been to conduct a broad survey across a range of policies, initiatives and programmes in order to document the current circumstances as a starting point for further discussions, technical meetings and policy debates with a view to enhance the use of wood in buildings through policy advice to member States.</p> <p><a href="http://www.unece.org/fileadmin/DAM/timber/publications/SP-38.pdf">http://www.unece.org/fileadmin/DAM/timber/publications/SP-38.pdf</a></p>	<p>The results of the study on “Promoting sustainable building materials and the implications on the use of wood in buildings” contribute to forming the opinion of the legislators and general public on wood being “ecologically, economically and technically preferred” construction material.</p>
<p><b>E.5.1</b></p> <p><b>Monitor green economy developments in the ECE region forest sector and ensure that organisations active on global green economy issues, such as UNEP, are aware of them.</b></p>	<p><b>UNECE/FAO, UNEP</b></p>	<p>Mid-term review of the Rovaniemi Action Plan (2018)</p>	<p>The mid-term review of the Rovaniemi Action Plan contributes to monitoring of economy developments in the ECE region forest sector by collecting voluntary contributions and case studies by member States and relevant stakeholders.</p>	<p>Member States and stakeholders voluntarily submitted information about activities that contribute to the implementation of the Rovaniemi Action Plan. This information will contribute to monitoring green economy developments in the ECE region through the means of the mid-term review of the Rovaniemi Action Plan.</p>

E.5.1			<p>Workshop: "Measuring the Value of Forests in a Green Economy" (Geneva, 21 October 2016)</p>	<p>The workshop provided brought together experts in macroeconomic analysis and the forest sector. The Joint Section invited the contributions from and organised the workshop in partnership with key organisations, active in the development of international measuring systems for a green economy: the Green Growth Knowledge Platform (GGKP), Organisation for Economic Cooperation and Development (OECD), The Economics of Ecosystems and Biodiversity (TEEB) Initiative at the United Nations Environment Programme (UNEP) and the Wealth Accounting and the Valuation of Ecosystem Services (WAVES) Partnership of the World Bank. Also, the Statistical Divisions of UNECE and FAO were consulted and invited to provide their contributions to the discussion.</p> <p><a href="http://www.unece.org/index.php?id=42822">http://www.unece.org/index.php?id=42822</a>        Report of the workshop: <a href="http://www.unece.org/fileadmin/DAM/timber/meetings/20161021/Workshop_report_-_Measuring_the_value_of_forests_in_a_green_economy.pdf">http://www.unece.org/fileadmin/DAM/timber/meetings/20161021/Workshop_report_-_Measuring_the_value_of_forests_in_a_green_economy.pdf</a></p>	<p>The workshop concluded that there are synergies between the work of the green economy and forest sector experts and it will be possible to develop a narrative for the forest sector aligned with the one on green economy and the green growth. To achieve that, there is a need to work together and build intra-agency, cooperative networks.</p>
E.5.4	<p><b>Establish cross-sectoral working groups, develop contacts with other green economy sectors, and share experience (also international) and identify success factors.</b></p>	<p><b>UNECE/FAO</b></p>			

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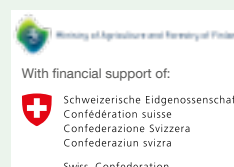


# Mid-Term Review of the Rovaniemi Action Plan for the Forest Sector in a Green Economy

This publication is a mid-term review of actions that have been implemented and are in line with the Rovaniemi Action Plan (RAP). Stakeholders of the RAP provide input and the Joint Section also reviewed its own activities. This study also contains a general review of actions reported during 2017, as well as information gathered through the previous voluntary update on the status of the implementation by the member States in 2014.

Information Service  
United Nations Economic Commission for Europe

Palais des Nations  
CH - 1211 Geneva 10, Switzerland  
Telephone: +41(0)22 917 12 34  
Fax: +41(0)22 917 05 05  
E-mail: [unece\\_info@un.org](mailto:unece_info@un.org)  
Website: <http://www.unece.org>



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