

# Flagship Project

# Forests of the future



## PROJECT DOCUMENT

### 1. EXECUTIVE SUMMARY

<b>Project Title</b>	Forests of the future Developing outlook studies to shape forests policies of the next thirty years
<b>Project Manager</b>	Florian Steierer, UNECE-FAO Forestry and Timber Section
<b>Sub-programme</b>	Forestry and Timber
<b>Implementing Entity</b>	UNECE
<b>Start Date</b>	01 April 2017
<b>End Date</b>	31 December 2019
<b>Budget</b>	427,038 USD
<b>Beneficiary Countries</b>	UNECE member States
<b>Cooperating Entities within the UN System</b>	FAO
<b>Other Implementing Partners</b>	Members of the Team of Specialists on Forest Sector Outlook

## **Brief description**

This project addresses the issue of sustainable forest management in the UNECE region. Specifically, the project addresses the development of scenarios of forests and forest products in the region (outlook). Scenarios and the information they provide on different aspects of forest management (e.g. on climate change, biodiversity, trade and markets, etc.) ensure that policies at the national level are in line with sustainable development goals, the global forest goals and targets, and a green economy in the UNECE region.

Sector Outlook Studies are a major component of the integrated programme of work of the UNECE Committee on Forests and the Forest Industry and the FAO European Forestry Commission. Since 1952, all these studies have aimed to map out possible or likely future developments, based on past trends used as references, as a contribution to evidence-based policy formulation and decision-making.

The Outlook Studies address and discuss these demanding challenges. Through scenario analysis, policy makers evaluate the long-term consequences of possible policy choices. These choices are assessed according to their sustainability and recommendations are proposed based on the trade-offs facing policy makers. Decision makers are encouraged to reflect upon these analyses and to consider them when taking possible future policy actions.

The project links to the UNECE Strategic Framework 2016-17 and 2018-19, with specific reference to sub-programme 7, Forestry and Timber, expected accomplishment (a) *Improved monitoring and assessment of the forest sector to support sustainable forest management*.

The project contributes directly to the achievement of Sustainable Development Goal (SDG) 15 (protect, restore and promote the sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss),

The project also contributes to SDG 6 (water and sanitation), SDG 7 (sustainable energy), SDG 8 (economic growth), SDG 9 (sustainable industry) SDG 11 (urban resilience), SDG 12 (sustainable production and consumption patterns), and SDG 13 (climate change) (see point 2.4). The project also contributes to the implementation of United Nations Strategic Plan on Forests and the Rovaniemi Action Plan for the Forest Sector in a Green Economy.

## **2. Background**

### **2.1 Context**

Although the Outlook Studies are usually produced roughly at 10/15-year intervals (the last study was issued in 2011), the UNECE/FAO Working Party on Forests Economics, Statistics and Management requested the Team of Specialists (ToS) on the Forest Sector Outlook to start producing a new round of outlook earlier (TIM/EFC/WP.2/2015/2). The most important reason for an earlier update are the structural changes that are taking place in the sector. The consumption of newspaper is declining due to the importance of electronic media, and the use of woody biomass for energy is increasing very quickly. The increasing impact of climate change also calls for urgent adaptation and mitigation policies. Biodiversity loss continues, and requires the implementation of policies to conserve and protect biodiversity, while maintaining other forest functions.

As a first step towards a new round of Outlook Studies, a list of relevant policy issues was compiled and discussed with another ToS of UNECE focusing on Forest Policy and other relevant stakeholders, and was further discussed at the COFFI meeting in Kazan in 2014 (ECE/TIM/2014/Inf.5). In short, the issues are the following:

- Competitiveness of forest industries and forest products (influence of upcoming Asian markets, impact of the mobilization of Russian forest resources, mismatch between supply from the forest and demand from industry);
- Structural changes in markets, industries and demand (bioenergy and bio-refineries, influence of policy targets with respect to the Green Economy, decline in paper/newsprint);
- Ownership/tenure systems in the UNECE region and their adequacy to deliver multiple benefits to society;
- Balancing the multitude of functions that forests deliver, and related trade-offs (e.g. influence of Aichi biodiversity targets, identifying the optimal contribution to climate change mitigation, valuation of all forest functions);
- Adaptation to climate change; and
- Impact of forest damage, notably fires and insect outbreaks, on the sustainable management of UNECE forests.

The studies will also be developed taking into account the goals and objectives of the 2030 Sustainable Development Agenda and the Paris Agreement, and the key roles that forest ecosystems play in sustainable development and for the mitigation of climate change.

For the next round of outlook studies, the ToS intends to produce three regional studies (Europe, North America, and Russian Federation and CIS). These studies will be better aligned than the previous studies using common models and/or scenarios.

### **2.2 Mandates, comparative advantage and link to the Programme Budget**

The project supports the implementation of the UNECE-FAO Joint Integrated Programme of Work, which includes the development of forest sector outlook studies (Europe, North America, Russia and CIS.). The project contributes to the core normative mandate of the Joint UNECE-FAO Forestry and Timber Section and their intergovernmental bodies, the Committee on Forest and the Forest

Industry and the European Forestry Commission. UNECE and FAO are the designated organizations, through their joint section in Geneva, to undertake the forest outlook studies in the UNECE region. The mandate for the development of Outlook Studies in the region is contained in the Integrated ECE-FAO Programme of work, under Work Area 2: Policy Dialogue and Advice, para 16 <sup>1</sup> (EFC/TIM/2013/2-FO:EFC/2013/2) . There are no other intergovernmental organizations in the European context to develop such scenarios/projections.

The UNECE/FAO Forestry and Timber Section is best placed to lead and coordinate the preparation of these studies, given the support provided by the Team of Specialists on the Forest Outlook to the development of the studies; the Section's longstanding work on forest policy with other partners in the region; the availability of data on forest statistics and information; and the long experience in preparing these studies since 1952, which have increased its expertise over time.

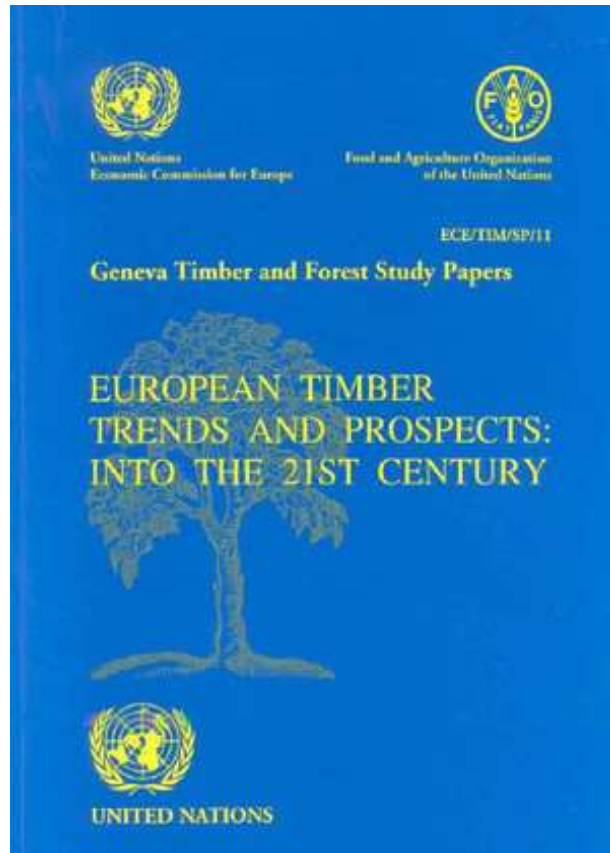
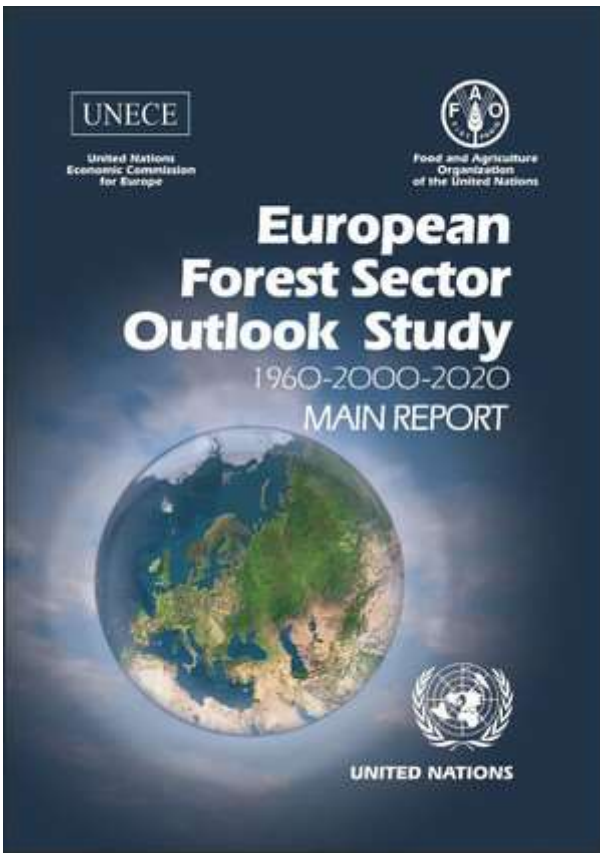
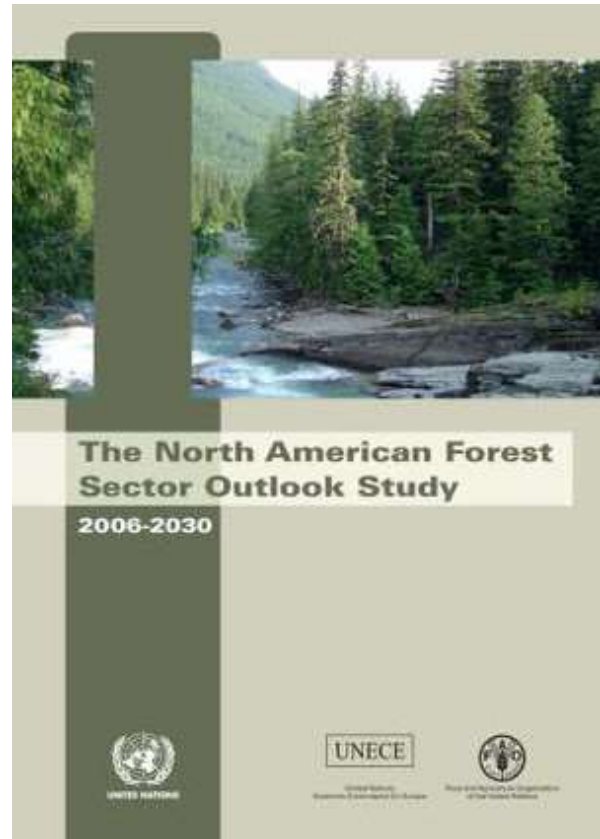
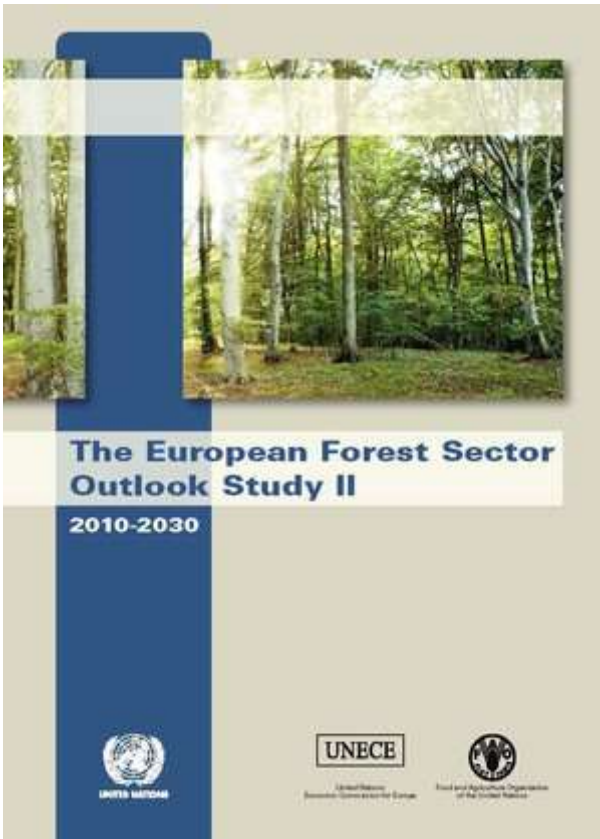
### **2.3 Country demand and target countries**

From the early 1950s to the present day, forest sector Outlook Studies have been central to UNECE/FAO activities. They have identified and analyzed structural changes in the sector and explored policy responses to emerging issues. Over the decades, the issues have changed, but the studies have all been comprehensive in their scope, and as quantitative as possible in their analysis. They have had a major influence also on the Committee and the Commission's areas of interest. The first five studies were referred to as "European Timber Trends Studies" (abbreviated to ETTS) and then as European Forest Sector Outlook studies (EFSOS), recognizing that the scope was wider than just "timber". There have also been studies for North America and Russia.

Developing forests outlooks is an essential tool to support evidence-based decision-making at the country level for all UNECE member States. The work will benefit all key stakeholders, including policy makers, national experts and practitioners from public and private sectors. The Team of Specialists (ToS) on the Forest Sector Outlook supports the work. The project will continue to aim to increase participation from CIS countries to ensure proper coverage of the ECE region.

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<sup>1</sup> [https://www.unece.org/fileadmin/DAM/timber/Content/website/Integrated\\_PoW\\_2014-2017\\_En.pdf](https://www.unece.org/fileadmin/DAM/timber/Content/website/Integrated_PoW_2014-2017_En.pdf)



## 2.4 Link to the SDGs

Project activities will contribute to the 2030 Agenda for Sustainable Development, with a particular focus on Goal 15: “protect, restore and promote the sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”. Given the interconnected nature of SDGs, and the specific ‘scenarios’ of the outlook studies, covering aspects such as climate change, biodiversity, forest-related industries, sustainable products and markets, and wood energy.

The project will also contribute to other SDGs: SDG 6 (water and sanitation), SDG 7 (sustainable energy), SDG 8 (economic growth), SDG 9 (sustainable industry) SDG 11 (urban resilience), SDG 12 (sustainable production and consumption patterns), and SDG 13 (climate change). The project will also contribute to the implementation of the United Nations Strategic Plan on Forests and Rovaniemi Action Plan for the Forest Sector in a Green Economy.

A gender perspective applies in all project activities of data collection and use, as appropriate and whenever feasible. The project will endeavor to strengthen the participation of women and take into account the gender perspective in conformity with the UNECE Gender Action Plan. UNECE will implement the project in cooperation with FAO, which shares the same programme of work for forests in the region with UNECE (see reference above).

## 3. ANALYSIS

### 3.1 Problem analysis

Expectations of the region’s forests to meet increasing environmental, social and economic demands have never been higher. UNECE forest sector policy makers must grapple with complex, imperfectly understood challenges to meet these demands when designing forest policies. These policies will have to address multiple challenges such as climate change, protection of biodiversity, space for recreation and leisure, and energy and raw material needs.

*Climate change:* The estimated forest biomass carbon sink - the carbon sequestered each year by the UNECE region forest ecosystems – amounts to 255 million tons of carbon per year between 2005 and 2010. This shows that UNECE forests are a significant carbon sink, mitigating to the extent possible the effects of climate change. While sustainable forest management contributes to maintaining the mitigation function of the forest, it now also needs to be increasingly applied to support adaptation to climate change. At the same time, policies and institutional responses have to adapt to address the consequences of climate change impacts, such as pests, diseases, storms and forest fires.

*Forest industries:* Overall, the forest sector’s contribution to GDP in the UNECE region has fallen in absolute terms, and its share in the region’s economy has declined from 1.2% to 0.8% over a decade. At the same time, there is a rising demand for the use of wood for energy and raw material inputs. Wood energy accounts for 3.5% of the total primary energy supply (TPES) and 38.2% of the renewable energy supply (RES) in the UNECE region, making it the first source of renewable energy in the region. Forest-based industries continue to demand a reliable supply of raw material inputs. Simultaneously, the use of wood for energy is intensifying to meet ambitious renewable energy targets. However, mobilizing enough wood to satisfy this growing need could come at a significant environmental, financial and institutional cost. Innovation has the potential to introduce wood-based

products with novel uses and applications. Growth in the use of wood for new industrial needs and renewable energy demands will need to be balanced with the other functions and uses of forest resources.

*Biodiversity:* The area of forest cover has been expanding in all parts of the region for several decades. The net increase between 2000 and 2015 was 28.1 million hectares or 1.5% of the total area of forest and other wooded land in 2000. The area of forest protected for biodiversity has also increased continually during the 20 years period in the whole UNECE region, to about 12% in 2015. Despite the positive trend, forest management approaches will need to continuously ensure that forest ecosystems are able to continue to conserve biodiversity. Forests also need to be managed in a manner that guarantees the provision of a range of other environmental and social services, namely supporting and regulating clean air and water quality while providing the cultural and recreational services important to the daily life of many citizens.

The Outlook Studies address and discuss these demanding challenges. Through scenario analysis, policy makers are presented with the long-term consequences of possible policy choices. These choices are assessed according to their sustainability and recommendations are proposed based on the trade-offs facing policy makers. Decision makers are encouraged to reflect upon these analyses and to consider them when taking possible future policy actions.

For instance, EFSOSII indicated that, if wood is to play its part in reaching the target for renewable energy, with rather favorable assumptions about energy efficiency and increases for other renewable energies, and without expanding forest area, wood supply would have to be mobilized strongly, increasing by nearly 50% in twenty years. However, the mobilization of such high volumes would have significant environmental, financial and institutional costs. To achieve this level of highly intensive silviculture and harvesting, strong political will would be necessary to modify many framework conditions for wood supply. The very high levels of extraction of residues and stumps would negatively affect nutrient flow, soil carbon and thus water holding capacity and biodiversity. Forests would also be less attractive for recreation.

### **3.2 Country level problem analysis**

Countries in the UNECE region are faced with similar problems, but the condition of forests vary. Outlook studies highlight these differences and develop methodologies to develop scenarios that can be adapted to the different realities. Country analysis can then also be developed on the basis of the region-wide ones focusing on national policy goals. See for instance the Outlook Study for Sweden: <http://www.unece.org/index.php?id=28695> developed on the basis of EFSOSII.

These national studies benefit from the modelling and analysis of regional studies and develop specific scenarios for the country. Different stakeholders at the national level benefit from information on possible future trends and use it in support of decision-making for each specific situation (e.g. market development; development of national policies; development of forest conservation strategies; etc.)



### 3.3 Stakeholder analysis and capacity assessment

Non UN stakeholders	Type and level of involvement in the project	Capacity assessment	Capacity gap	Desired future outcomes	Incentives
<b>Ministries of Environment /Agriculture and Forestry</b>	Involved directly through experts in the ToS /policy makers	Direct knowledge of challenges at the national level	Lack of understanding of consequences of policy actions	Better understanding of dynamics & ability to develop appropriate forest policies, in line with desired outcomes and overall national goals	Request of countries for information in support of policy-making
<b>Teams of Specialists</b>	Direct involvement: provision of expertise	ToS knowledge and data are a primary source of information for the study	Lack of information at the regional level, information on other national situations	Sharing of information with other experts, developing the study	Experience and knowledge gained
<b>Private sector</b>	Indirect: benefitting from results. Direct: provision of data.	Data/information from the private sector on forest industries	Need to bridge the knowledge gap on the unknowns of future markets.	Information on possible scenarios and consequences of policies on the market.	Need for results and information.
<b>Policy-makers at the national and international level</b>	Direct involvement in developing policy questions the study needs to answer.	Ability to develop relevant policy questions	Lack of information in support of decision making	Scenarios, which would guide decision-making	Need to inform decision-making & support with reliable data /information
<b>Academia /research institutes</b>	Direct. Many researchers from different research institutes or academia provide their support	Modelling and expertise	Need to gather data from the source and exchange information	Development of scenarios	Academic knowledge & expertise, exchanges, gathering of data and information from the source.

## **4 PROJECT STRATEGY: OBJECTIVE, EXPECTED ACCOMPLISHMENTS, INDICATORS, MAIN ACTIVITIES**

### **4.1 Project Strategy**

To enhance the knowledge of policy-makers and other stakeholders of forest and forests services and products to develop evidence-based forest policies (Expected Accomplishment), it is necessary to improve understanding on the interactions among the many forest functions. Moreover, the impact of certain actions on the forest ecosystem, and the balance amounts different functions (e.g. recreational, productive, ecosystem services), need to be ‘measured’ in order to align the desired policy (e.g. more wood energy) with action (e.g. intensified silviculture), results (e.g. wood mobilization) and consequences (e.g. less nutrients flow, reduced biodiversity, etc.). In order to increase this understanding, it is necessary to develop outlook studies, which, as indicated in the objective below, would analyse the structural developments of the sector, develop possible scenarios, and supply information in support of policy-making.

UNECE will implement the project and develop the three studies in cooperation with FAO through their joint work by the Section and with the support of the Team of Specialist on the Forest Sector Outlook. Both the Section and the ToS will report regularly on progress made in the development of the Outlook at the annual meetings of the Joint ECE/FAO Working Party on Forests Economics, Statistics and Management.

Consultations meetings and experts workshops will be convened in coordination with the above-mentioned Working Party meeting as deemed relevant. Assistance at the national level will be delivered through the experts in the ToS.

Workshops and consultation meetings will be organized on demand by member States and ideally back-to-back with other relevant meetings with a view to reduce the costs and will help targeting competent officials and experts in countries throughout the project duration.

## 4.2 Logical Framework

Intervention logic	Indicators	Means of verification
<b>Objectives</b> The objective of the project is to enhance the knowledge available to policy makers and other stakeholders in developing evidence-based forest policies to promote sustainable forest management in the UNECE region		
<b>Expected accomplishment - EA1</b> Enhanced knowledge of policy makers and other stakeholders of forest and forests services and products to develop evidence-based forest policies	<b>IA 1.1</b> Outlook studies for Europe, North America and Russia and the CIS produced in line with deadlines of ToS	Studies published and available to countries
<b>A1.1</b> Development of the Europe, North America and Russia and the CIS studies		
<b>A1.2</b> Organization of 3 expert meetings for sub-region on the forests sector outlook		

## 4.3 Risks and mitigation actions

Risks	Mitigating Actions
<b>R1.</b> Following the provisions of the UNECE Strategic Framework 2018-2019 (sub-programme 7. Forestry and Timber) the project proposal assumes that also the UNECE-FAO Integrated Programme of Work 2018-21 will address similar studies.	<b>M1.</b> As of March 2017, the draft proposal has no major difference from the previous one, thus the probability of this occurring is quite low. All MS have already provided comments and no comment received proposed to stop the work on Outlooks studies or discontinue the ToS.
<b>R2.</b> The project also assumes that cooperation with FAO, through the joint UNECE-FAO Forestry and Timber Section in Geneva will continue.	<b>M2.</b> At the moment, there are no changes to the open-ended UNECE-FAO partnership agreement. In any case, staff dedicated to this specific task is UNECE.

## 4.4 Sustainability

This activity has been requested and supported by member States of UNECE and FAO since 1952. Recurrent studies looking at the future of the sector and providing possible scenarios have been the key for policy makers to develop their long-term strategies. Given the many recognized functions of forests in our region and the increased pressure on forest resources, a study understanding the interactions and trade-offs amongst functions becomes even more necessary.

The results of the study are shared with all stakeholders in print and through the web and in all relevant meetings of UNECE and FAO, through official presentations and side events. Stakeholders use the studies in different ways, translating results in accordance with their needs (e.g. policy making, use of data, development of national outlooks, etc.). Leverage of additional funding might be needed if individual or group of countries request national/sub-regional outlook studies, but do not have the funds available to support the activity. This issue would need to be addressed after completion of the project in 2019. At this stage, it is not possible to product results and thus the need for specific additional studies.

## **5 MONITORING AND EVALUATION**

Experts in the ToS will provide technical advice and recommendations on the development of the study and, in particular, the utilization of specific methods and models to develop scenarios. They will also be responsible for monitoring implementation of the project, together with the UNECE-FAO Forestry and Timber Section. Updates on the project implementation will be shared with all member States through COFFI and through the on-line platform.

All monitoring, reporting and evaluation of the project will be undertaken in compliance with UNECE policies, UN Financial Rules and Regulations.

## **6 MANAGEMENT AND COORDINATION AGREEMENTS**

The overall management and control of the project lies with UNECE/FAO Forestry and Timber Section, and is executed in compliance with United Nations administrative financial rules and regulations. UNECE will work in close cooperation with the Team of Specialists and consult as appropriate with regional and international stakeholders (e.g. European Forest Institute, Forest Europe, etc.) if the need arises. All stakeholders can contribute to the project by participating in the consultations/workshops. The UNECE/FAO Forestry and Timber Section will work in partnership and coordination with FAO through both its joint section in Geneva as well as the relevant office in Rome to share information and expertise.

### Annex 1 - Results-based work plan

EA	Activity #	Timeframe by activity		Budget class and Code <i>(Please use the budget classes listed in the table above.)</i>		Amount (USD)	
		Year <i>(Y1, Y2, Y3, Y4)</i>	Quarter <i>(Q1, Q2, Q3, Q4)</i>				
EA1	A1.1(a) b) <sup>2</sup> and (c)	2017	Q1, Q4	Other Staff Costs (GTA)	010	0	
				Consultants	010	180,000	
				Travel of Staff	160	0	
		2018	Q3, Q4	Contractual Services	120	28,000	
				Operating and other direct costs	125	0	
		2019	Q3, Q4	Equipment vehicles and furniture	135	0	
		A1.2 (a) (b) and (c)	2017	Q3	Workshops/ Study Tours	160	0
	Travel of Staff				160	50,000	
	2018		Q3	Travel of participants	160	24,000	
				Consultants	010	15,000	
	2019		Q2	Contractual services	120	51,000	
				Operating and other direct costs	125	22,500	
	Evaluation (for projects at/ above \$250,000)				Consultant	010	7,410

<sup>2</sup> The previous North America Outlook Study largely benefitted from in kind support of the USA. Costs included in the budget above reflect amounts needed, should in kind support not be available.

## Annex 2 - Budget

### Consultants (010): \$ 202,410 (Total)

#### *International consultants*

International consultants for the task(s) of developing the three studies and organizing three expert workshops, in support of activities: A1.1 (1 consultant x study x 12 months x 5,000 USD = **60,000 x 3= 180,000**), A1.2 (1 consultant x workshop, x 1 month x 5,000 USD = 5,000 x 3 =**15,000**)

In support of the evaluation of the project: (2% of the project costs) = **7,410**

### Travel of Staff (160): \$ 50,000 (Total)

9 missions over 3 years by UN staff for the purpose of organizing and servicing expert meetings in North America, Europe and Russia/CIS), in support of activities A1.2 (9 missions per 2 people max).

(\$ 5,500 average mission cost) x (3 missions per annum x 3 years) = **\$50,000**

### Operating and other direct costs (125): \$ 22,500 (Total)

(Interpretation and translation cost required in the field missions or during the conference/ workshop/ seminar where simultaneous interpretation is required, telecommunication costs, UNDP cost recovery)

In support of A1.2 = **\$22,500**

### Contractual services (120): \$ 79,000 (Total)

A provision of \$79,000 is required for 3-4 individual contractors in support of the preparation of the three studies and the organization of 9 expert meetings (activities A1.1 and A.1.2).

### Travel of meeting participants (seminars, workshops, study tours) (160): \$ 24,000 (Total)

#### *Workshops & seminars*

Expert meetings in country in Europe and Russia/CIS, in support of A1.2. Duration of workshop: 1-2 days; (\$1,000 per participant) x (4 eligible countries per meeting) x (6 meetings) = **\$24,000**

### Budget summary:

<b>Total direct cost</b>	<b>\$ 370,500</b>
Evaluation (at least 2%)	\$ 7,410
13% UN Programme Support Cost	\$ 49,128
<b>Total budget</b>	<b>\$ 427,038</b>