

# **UNECE/FAO/Forest Europe**

# **Guidelines on the Promotion of Green Jobs in Forestry**









ECE/TIM/DP/77 Forestry and Timber Section, Geneva, Switzerland

**GENEVA TIMBER AND FOREST DISCUSSION PAPER 77** 

# UNECE/FAO/Forest Europe Guidelines on the Promotion of Green Jobs in Forestry



## COPYRIGHT AND DISCLAIMER

Copyright© 2020 United Nations and the Food and Agriculture Organization of the United Nations All rights reserved worldwide.

The designations employed in UNECE and FAO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the United Nations Economic Commission for Europe (UNECE) or the Food and Agriculture Organization of the United Nations (FAO) concerning the legal status of any country; area or territory or of its authorities, or concerning the delimitation of its frontiers. The responsibility for opinions expressed in studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by UNECE or FAO of the opinions expressed. Reference to names of firms and Commercial products and processes, whether or not these have been patented, does not imply their endorsement by UNECE or FAO, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

This work is copublished by the United Nations (UNECE) and FAO.

# **ABSTRACT**

This publication is intended to assist stakeholders in the forestry sector to successfully navigate the transition to a forest sector that is fully engaged in the green economy. New and increasing opportunities for providing forest-based services and products, growing business and revenue as well as creating jobs arise from this transition. Application of the guidelines will assist in ensuring that the forestry workforce is fit for purpose and forestry is able to attract workers in the 21st century's labour market.

### ECE/TIM/DP/77

United Nations publication issued by the Economic Commission for Europe (ECE)

Photos credits: @Shutterstock.

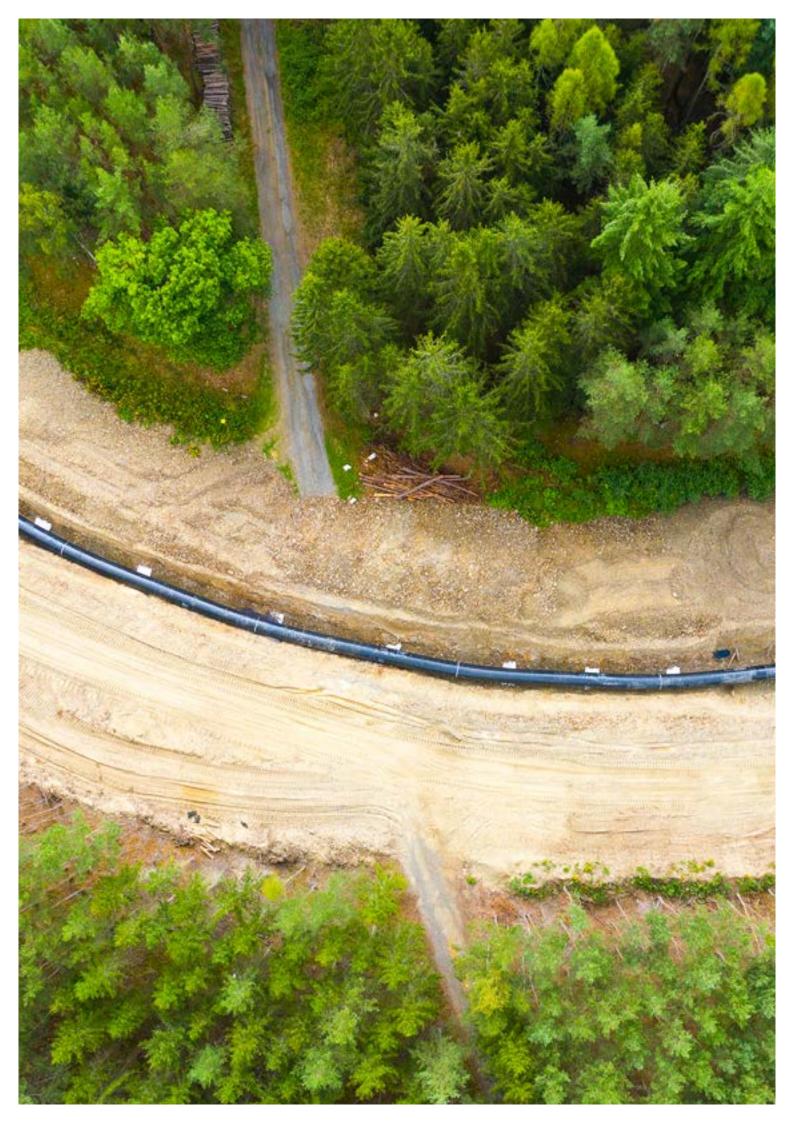
# **ACKNOWLEDGEMENTS**

This publication is the result of a cooperative effort from many people, partner organizations and the generosity of member states. The Joint UNECE/FAO Forestry and Timber Section and the Forest Europe Liaison Unit Bratislava recognize the people, organizations and member states listed below who contributed expertise and resources for the production of this publication.

Mr. Peter Poschen drafted the text of these Guidelines and Mr. Douglas Clark edited the text. Input and review of the manuscript were provided by the Forest Europe Expert Group on Green Jobs, Education and Training Systems, the UNECE/FAO Team of Specialists on Green Jobs in the Forest Sector (Joint UNECE/FAO/ILO Expert Network), Mr. Ünal Örnek, Coordinator of the Central Union of Turkish Forestry Cooperatives; Ms. Jessica Kaknevicius, Vice-President, Sustainable Forestry Initiative, Canada; Mr. Terry Sharik, Professor, School of Forest Resources and Environmental Science, Michigan Technological University, USA; Mr. Hui Wan, Associate Professor at the Department of Sustainable Bioproducts, Mississippi State University, and President of the Forest Products Society, USA. In addition, many participants of the September 2018 UNECE/FAO Workshop on Green Forest Jobs provided guidance on the publication content.

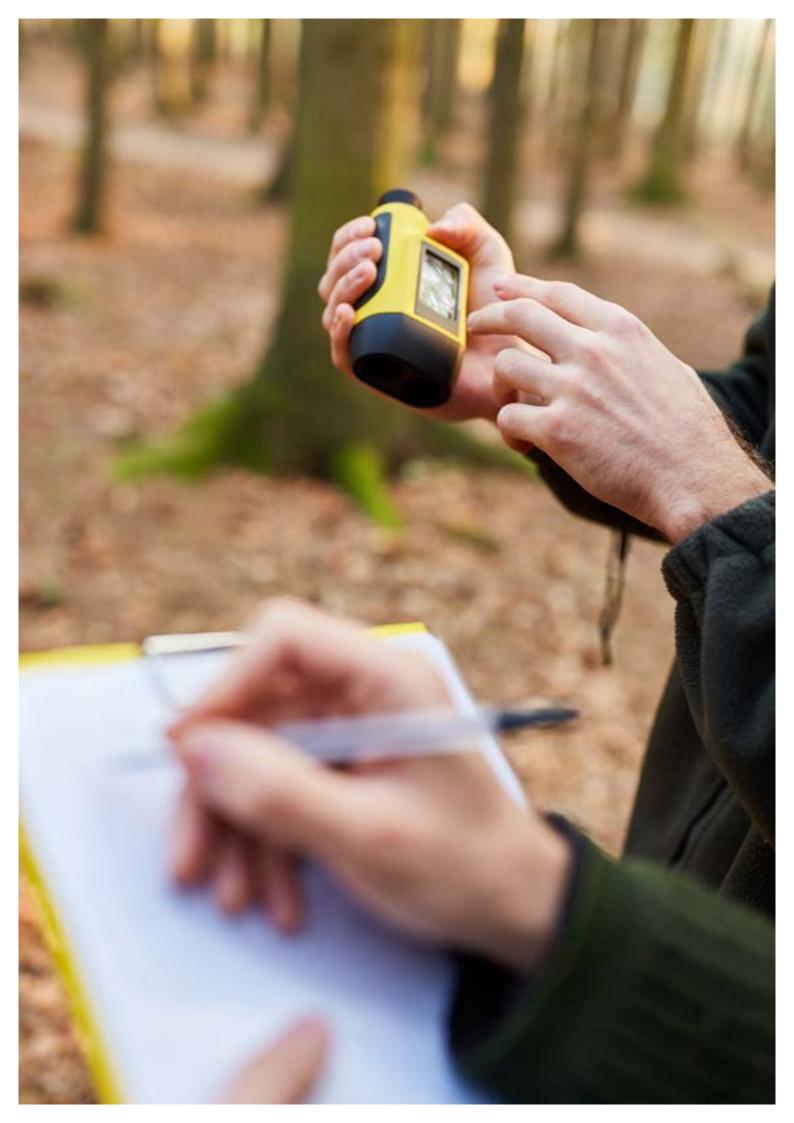
The work on the Guidelines was coordinated by Ms. Alicja Kacprzak. She was supported by Ms. Airen Lugt, who provided content review. The work was carried out under the supervision of Ms. Paola Deda, Director of the Forests, Land and Housing Division at UNECE and Mr. Ekrem Yazici, Deputy Chief of the UNECE/FAO Forestry and Timber Section.

Financial support for the publication came from the Swiss Confederation, via funds provided to the UNECE/FAO Forestry and Timber Section, and Germany, Slovakia, Spain, Sweden and Turkey, via funding provided to Forest Europe's work on the Guidelines aimed at the promoting of green jobs.



# CONTENTS

Acknowledgements			iii	
Exec	Executive Summary			
Back	Background			
Cha	opter 1	l. Introduction	xii	
1.1.	Definitions		1	
1.2.	Purpose and scope of the guidelines		2	
1.3.	8. Premises on which the guidelines are based		2	
1.4.	Action	areas, format and structure of the guidelines	4	
CI				
Cha	apter 2	2. Guidance on five action areas	6	
2.1	AREA 1	Workforce data, information, analysis, strategies for human resources development	7	
2.2.	AREA 2 Making the workforce in traditional forestry fit for purpose		9	
	2.2.1.	Identifying changes in job requirements and overcoming skills gaps	9	
	2.2.2.	Working conditions matching the requirements for decent work	10	
	2.2.3.	Occupational safety and health	15	
	2.2.4.	Work organization and contracting of service providers	17	
2.3.	AREA 3 Just transition		18	
2.4.	AREA 4 Seizing and expanding new opportunities for forests in a green economy		20	
2.5.	AREA 5 Recruiting, retraining and retaining the workforce of the future			
D - £			27	



# **EXECUTIVE SUMMARY**

The role of forests and forestry is changing rapidly and profoundly. Societies, policy makers and markets are placing a renewed focus on an expanded and universal vision of sustainable development with prosperous and inclusive societies living within planetary boundaries. Forests are central to this vision. This opens major opportunities for forests and forestry but also poses significant challenges. The Guidelines are intended to assist stakeholders in the forestry sector to successfully navigate the transition.

New and increasing opportunities for providing forest-based services and products, growing business and revenue as well as creating jobs arise from this transition. The importance of environmental services is becoming increasingly evident to society, in particular carbon sequestration, biodiversity protection and water treatment and retention. Markets for products are growing including in bioenergy, modern wood-based mass construction and a range of non-wood forest products. Moreover, the demand for downstream services such as environmental education, health services, recreation and tourism based on forests is rising significantly in many parts of the UNECE region.

Continued globalization of economies and advancing technology are two major challenges ahead for the forestry sector. In their wake, mechanization, reorganization of forestry supply chains, and increasing incorporation of information and communications technology, are reducing the number of workers needed in traditional forestry. Accelerating climate change and rising concern about biodiversity stress the importance of sustainable forest management. While employment in traditional forestry, focused on timber production, will most likely continue to decline, the remaining workforce will be critical for achieving effective and sustainable management of forests. At the same time, deficits in decency¹ of work in forestry, ageing workforces and populations combined with continued urbanization make it both more urgent and more difficult to attract the talent needed for the future.

A large and growing body of evidence shows that a skilled and enabled workforce is indispensable to meet the challenges and to seize the opportunities resulting from the transition to a green economy and sustainable development. Due attention has to be paid not only to the new and growing role of environmental goods and services, but also to greening production processes, the organization of work and the development of skills which would enable this transition. At present, there is a lack of competent and adaptable workforce in many forest enterprises, administrations and service providers. Following current trends, this workforce deficit may be even larger in the future.

### **Key areas for action**

Five key areas for action emerge from the analysis of the above drivers of change and their impact on forests and the forestry sector:

### Understanding the current workforce in forestry and its future needs

Information on the workforce, including on occupational safety and health (OSH), is vital but often missing and increasingly difficult to obtain. Stakeholder cooperation can overcome these difficulties, through increasing efforts to

预览已结束,完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5\_747

