

AFRY

ÅF PÖYRY



Global softwood availability - trends

International Softwood Conference 2023

SAMI PASTILA, AFRY MANAGEMENT CONSULTING

OCTOBER 12, 2023

INTRODUCTION

Our team

SAMI PASTILA



Senior Principal,
AFRY Management
Consulting Division

sami.pastila@afry.com

HEIKKI VIDGREN



Senior Principal,
AFRY Management
Consulting Division

heikki.vidgren@afry.com

ANTTI KOSKINEN



Principal,
AFRY Management
Consulting Division

antti.koskinen@afry.com

AFRY AT GLANCE

WE HAVE

19,000

Employees globally
(as of 2022)

WE HAVE NET SALES OF

2.3 bn

euros in 2022

NUMBER OF COUNTRIES
WITH AFRY OFFICES

>50

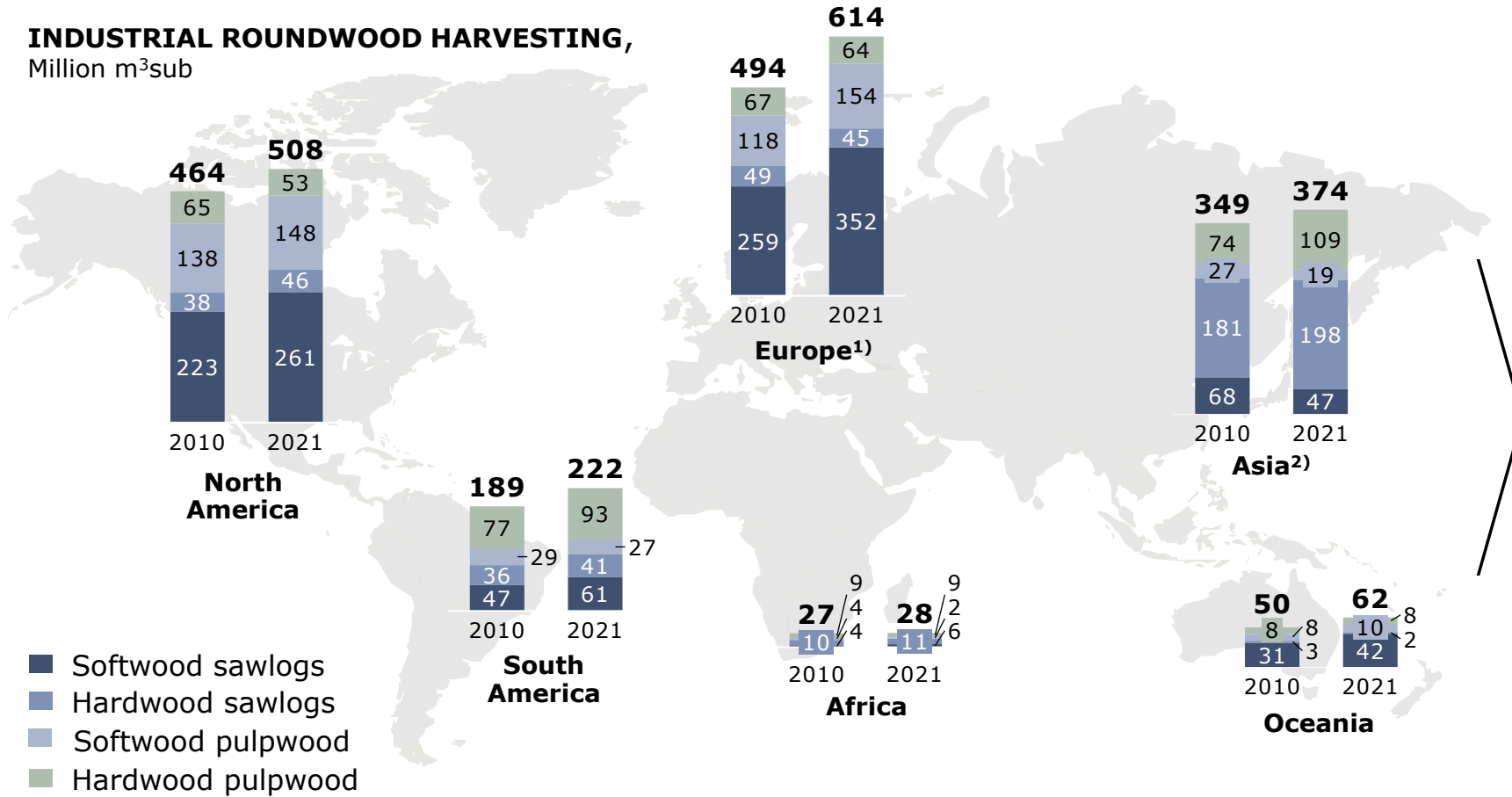
NUMBER OF COUNTRIES
WITH AFRY PROJECTS

>100

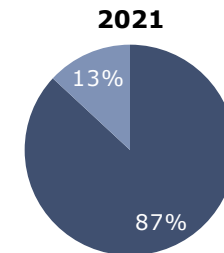
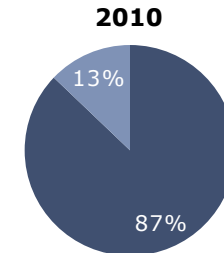


Northern hemisphere continues to drive the supply of softwood, accounting for close to 90% of current global softwood log supply

INDUSTRIAL ROUNDWOOD HARVESTING, Million m³sub



SHARE OF SOFTWOOD ROUNDWOOD HARVESTING



■ Northern hemisphere
■ Southern hemisphere

1) Including Russia. 2) including China. Source: FAO, AFRY

Most of softwood sawlog supply is processed locally in Europe

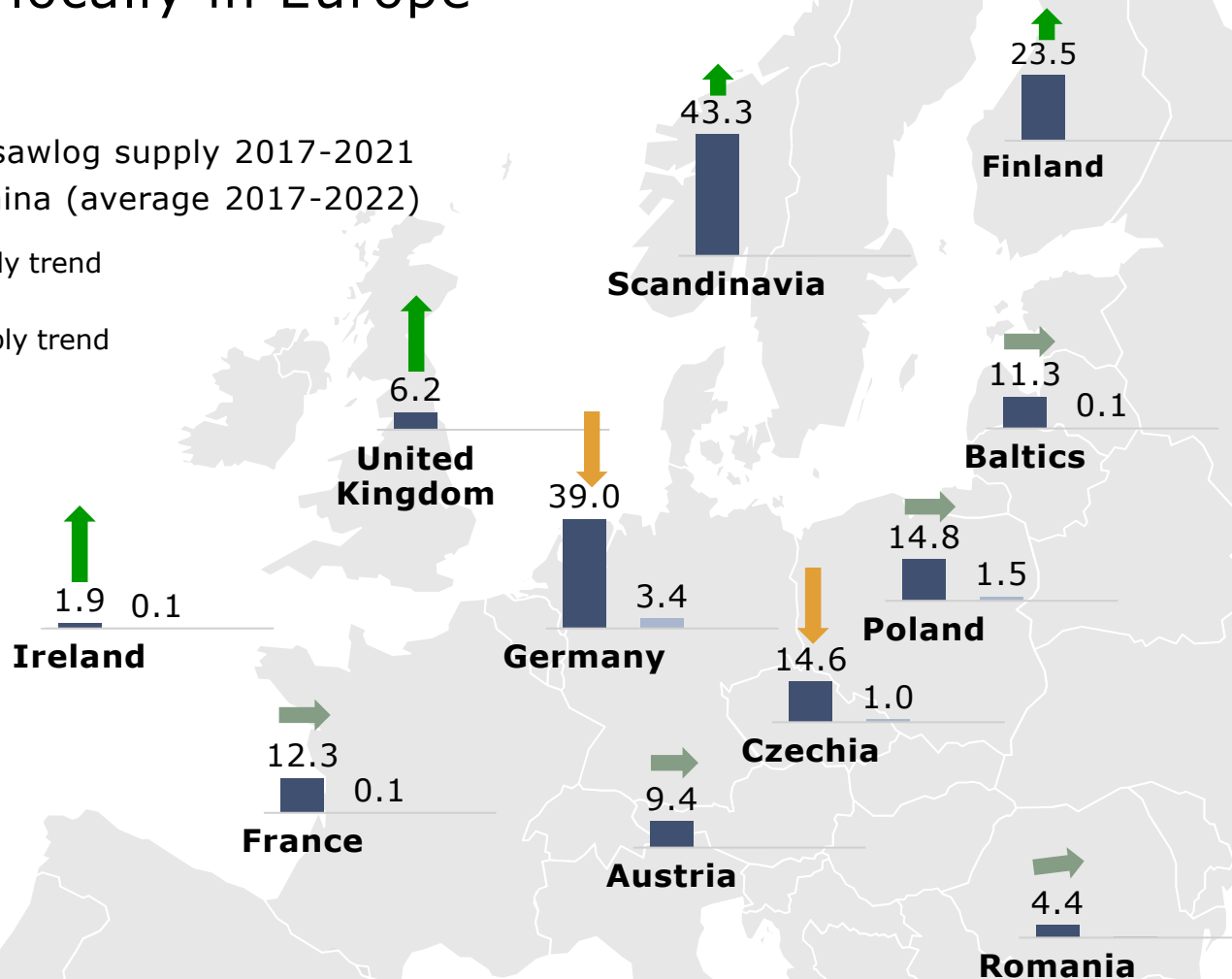
Million m³sub

■ Average SW sawlog supply 2017-2021

■ Exports to China (average 2017-2022)

↑ Increasing supply trend

→ Decreasing supply trend



Scandinavia and Finland are the main regions able to increase supply, triggering investments in the capacity

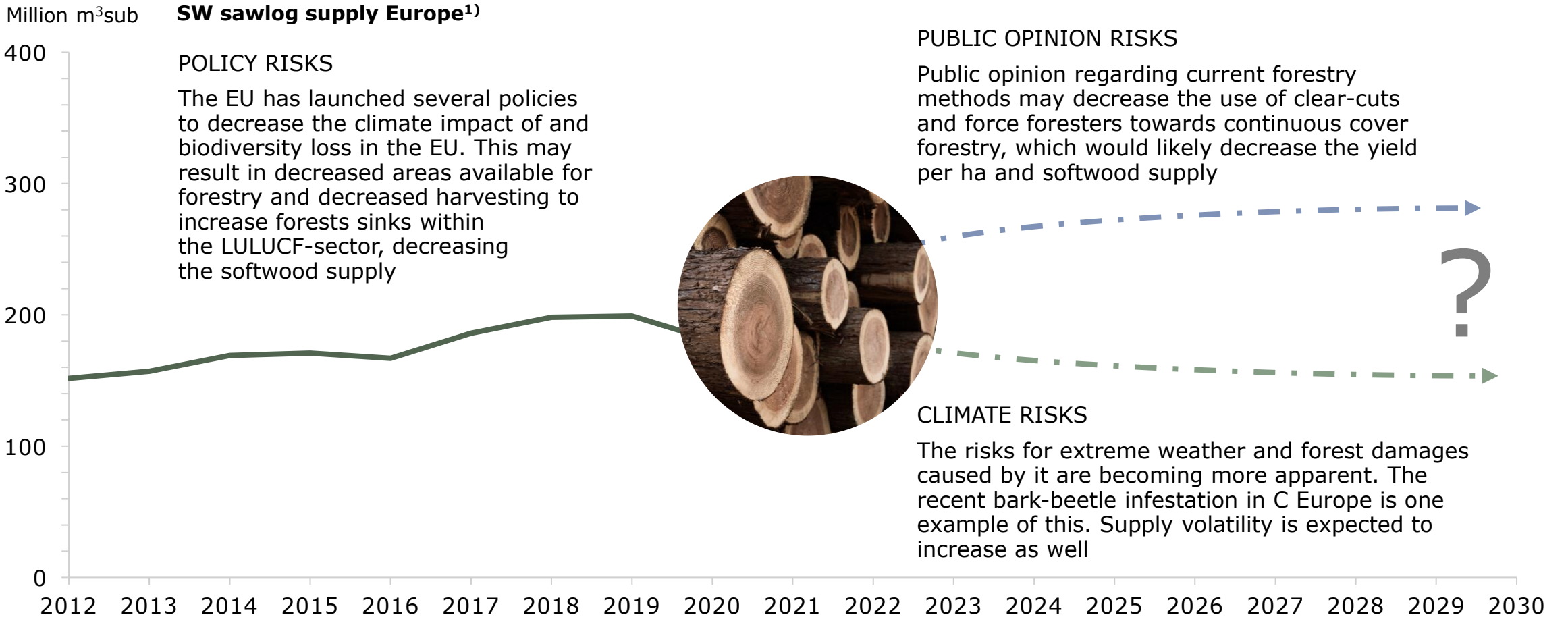


Easing damage situation in Central Europe driving the supply down



Sitka Spruce availability from the UK and Ireland increasing over time – yet marginal volume compared to overall Europe

EU regulations and initiatives may have significant impact on softwood supply in Europe, partly conflicting with climate targets of EU

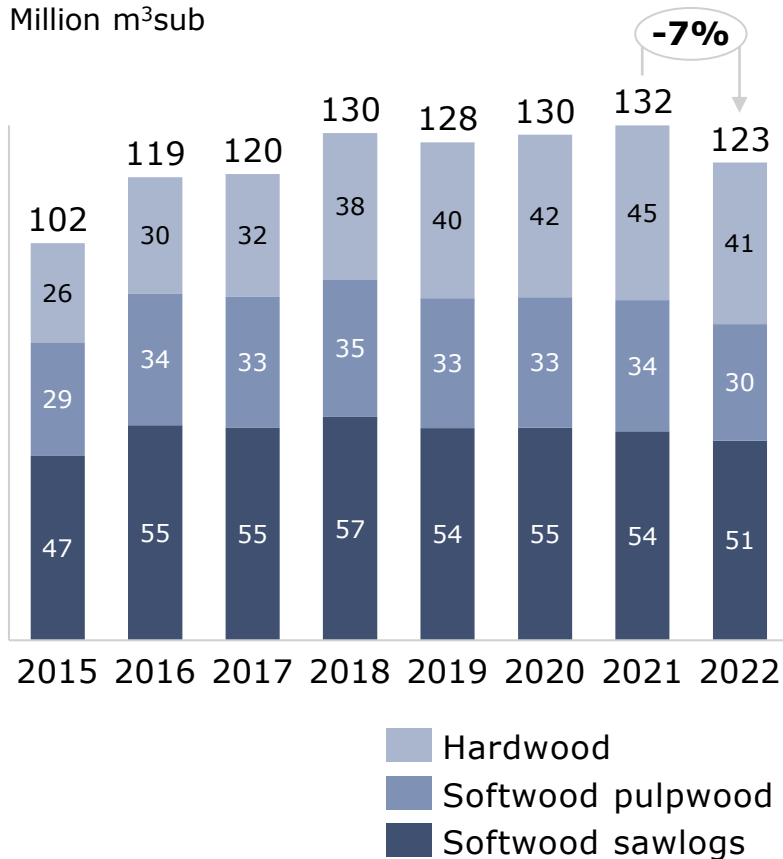


1) Including EU-27 and Iceland, Liechtenstein, Norway, Switzerland and United Kingdom Source: AFRY

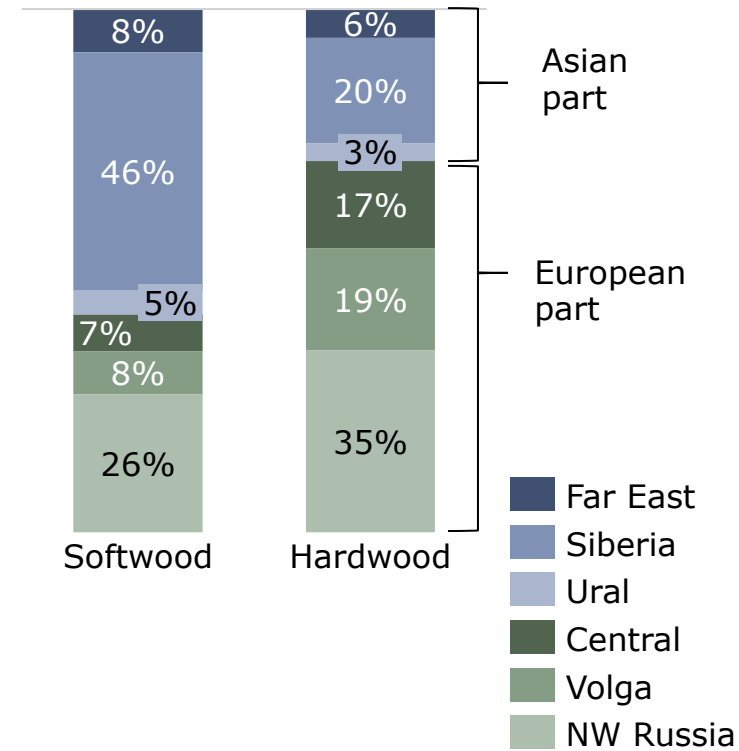
Russia's capability to supply wood may be at risk due to sanctions

HARVESTING OF INDUSTRIAL WOOD

Million m³sub



HARVESTING SPLIT PER FEDERAL REGION



Contribution of the Russian softwood surplus to global market is challenged by the geopolitics



Procurement chains suffer from sanctions – harvesting chain and capacity highly vulnerable



Depending on the development of Sino-Russian relations, Russia may push softwood to Chinese market in any form

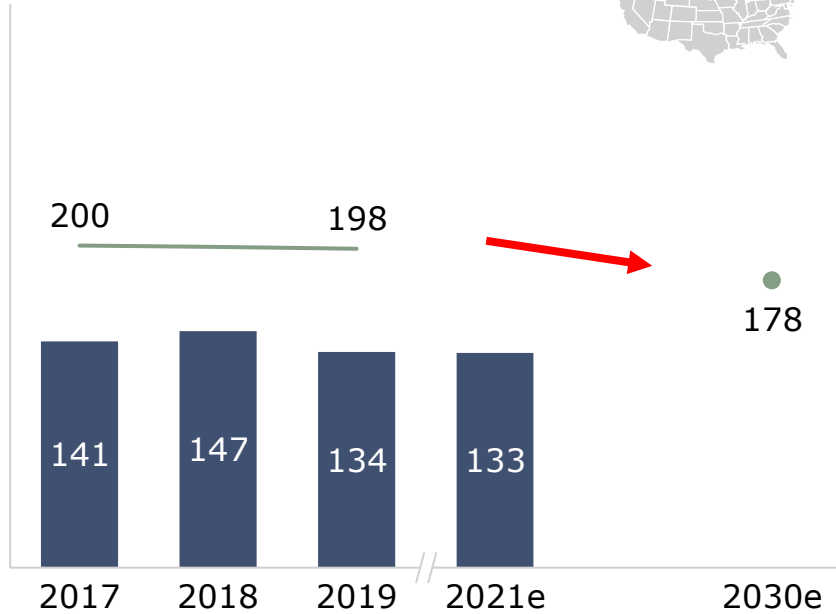
Source: Russian statistics, AFRY

North American softwood supply will keep afloat thanks to US South

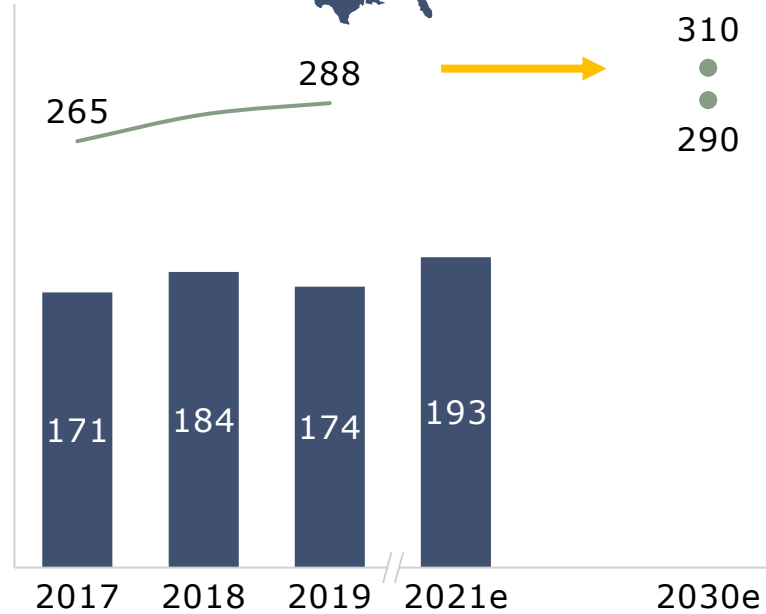
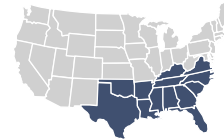
ANNUAL ALLOWABLE CUT (AAC)/HARVESTING POTENTIAL VS. HARVESTING

Million m³sub

Canada West, East and US PNW



US South



■ Softwood harvesting
— AAC/Annual net growth SW

Significantly weakening supply of boreal softwood from BC, US PNW and Canada East is expected



Surplus of SYP, though declining, in the US South allows the US to maintain role in softwood markets

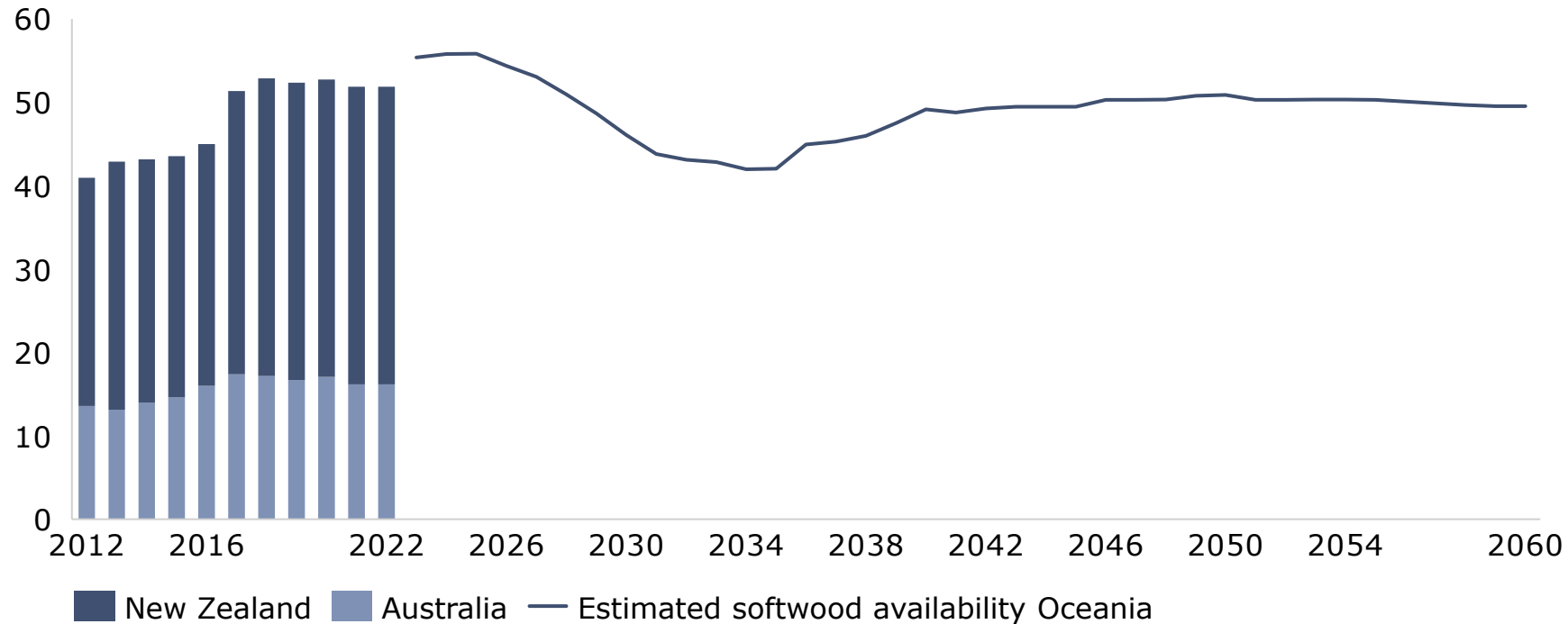


Europe may be able to gain in boreal softwood markets from North America

Additional contribution from Oceania to the log export market is not expected

DEVELOPMENT OF SOFTWOOD HARVESTING POTENTIAL AND HARVESTING IN AUS AND NZ

Million m³sub



The increasing supply from Australia and New Zealand has flattened out



Harvesting potential of softwood does not allow to increase the harvesting in Oceania



Increasing domestic demand may limit the available log export volumes

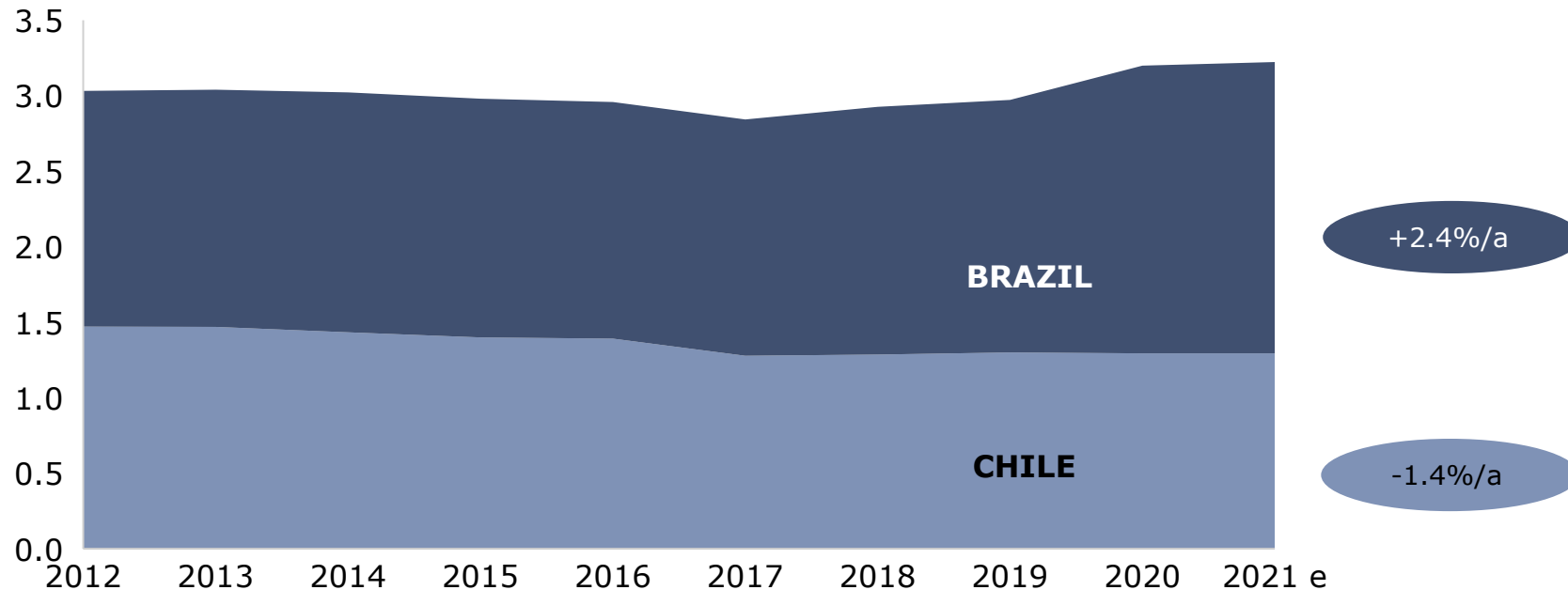
Source: Ministry for Primary Industries, ABARES, AFRY



Latin American softwood supply is expected to remain at stable level

DEVELOPMENT OF PINE PLANTATION AREA

Million ha



Chile has suffered from declining softwood area during the past decade – hardwood has gained share



Brazil has reversed the declining trend during the recent years, supported by a strong softwood market

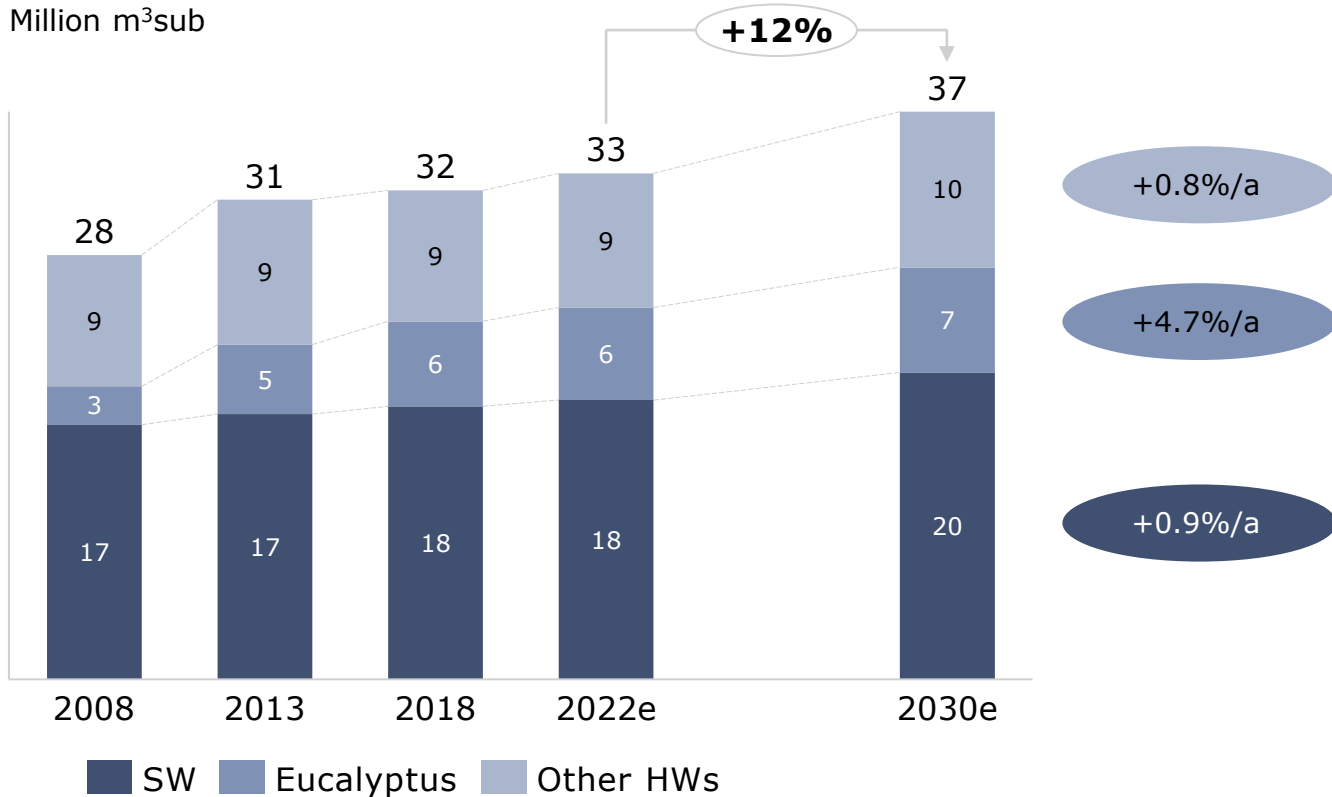


Overall Latin American supply is mainly driven by these countries – Argentina has largish untapped potential

Chinese capability to supply additional softwood volume is expected to continue to grow

SCENARIO FOR TIMBER FOREST PLANTATION AREA DEVELOPMENT

Million m³sub



Chinese capability to supply additional domestic raw material has not been at the pace of increasing demand



Competition for land limits the speed of planted area expansion, hardwoods dominating the demand going forward



Despite potentially increasing domestic supply and weakening demand, increasing reliance on imported softwood remains

Source: 2008-2018 State Forestry Administration of China 7th, 8th & 9th National Inventory Surveys; 2022 AFRY estimate

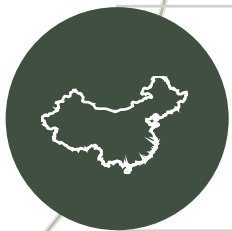
KEY TAKEAWAYS



Europe and North America will drive the supply of softwood – Europe is expected to gain share from North America in boreal softwoods, while southern yellow pines are increasing the share of North American supply



Additional availability of softwood from the Southern Hemisphere is limited with some exceptions – plantation establishment is focusing on hardwoods



China will remain increasingly dependent on imported softwood opening further opportunities for exporters – potential partly filled with Russian softwood products



DISCLAIMER AND RIGHTS

This report has been prepared by AFRY Management Consulting Oy ("AFRY") solely for use by (the "Recipient"). All other use is strictly prohibited and no other person or entity is permitted to use this report, unless otherwise agreed in writing by AFRY. By accepting delivery of this report, the Recipient acknowledges and agrees to the terms of this disclaimer.

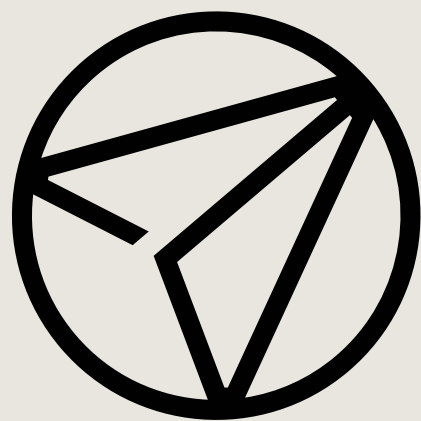
NOTHING IN THIS REPORT IS OR SHALL BE RELIED UPON AS A PROMISE OR REPRESENTATION OF FUTURE EVENTS OR RESULTS. AFRY HAS PREPARED THIS REPORT BASED ON INFORMATION AVAILABLE TO IT AT THE TIME OF ITS PREPARATION AND HAS NO DUTY TO UPDATE THIS REPORT.

AFRY makes no representation or warranty, expressed or implied, as to the accuracy or completeness of the information provided in this report or any other representation or warranty whatsoever concerning this report. This report is partly based on information that is not within AFRY's control. Statements in this report involving estimates are subject to change and actual amounts may differ materially from those described in this report depending on a variety of factors. AFRY hereby expressly disclaims any and all liability based, in whole or in part, on any inaccurate or incomplete information given to AFRY or arising out of the negligence, errors or omissions of AFRY or any of its officers, directors, employees or agents. Recipients' use of this report and any of the estimates contained herein shall be at Recipients' sole risk.

AFRY expressly disclaims any and all liability arising out of or relating to the use of this report except to the extent that a court of competent jurisdiction shall have determined by final judgment (not subject to further appeal) that any such liability is the result of the willful misconduct or gross negligence of AFRY. AFRY also hereby disclaims any and all liability for special, economic, incidental, punitive, indirect, or consequential damages. Under no circumstances shall AFRY have any liability relating to the use of this report in excess of the fees actually received by AFRY for the preparation of this report.

All information contained in this report is confidential and intended for the exclusive use of the Recipient. The Recipient may transmit the information contained in this report to its directors, officers, employees or professional advisors provided that such individuals are informed by the Recipient of the confidential nature of this report. All other use is strictly prohibited.

All rights (including copyrights) are reserved to AFRY. No part of this report may be reproduced in any form or by any means without prior permission in writing from AFRY. Any such permitted use or reproduction is expressly conditioned on the continued applicability of each of the terms and limitations contained in this disclaimer.



AFRY

ÅF PÖYRY