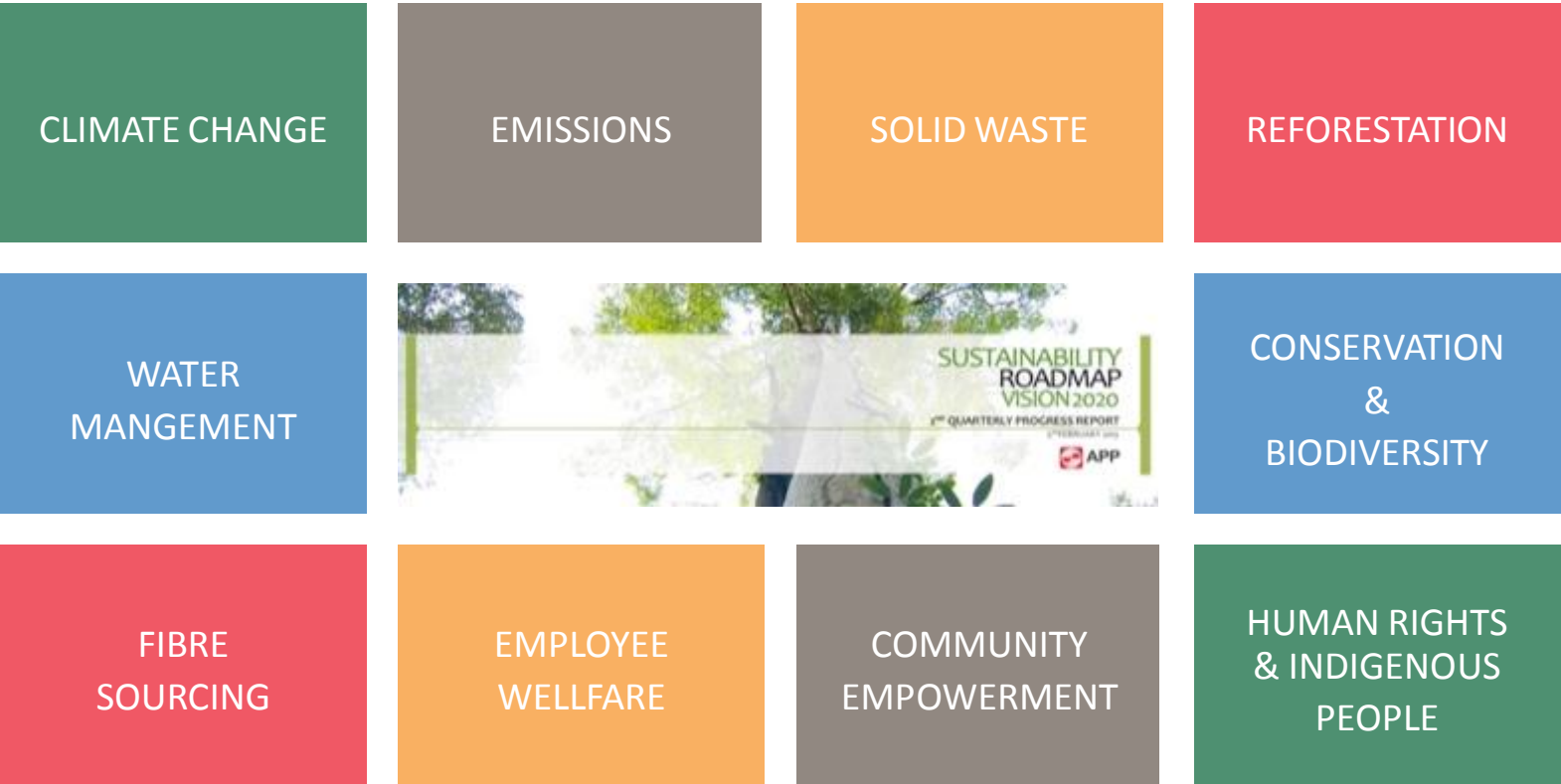


APP Sustainability Roadmap Vision 2020 Update

APP SUSTAINABILITY ROADMAP

In 2012, we launched The APP Sustainability Roadmap Vision 2020, which is our strategy to place sustainability at the heart of our operations



VISION 2020 – IMPACT AREAS



FIBER SOURCING

- (a) 100% independent 3rd party verification for pulpwood legality.
- (b) Zero High Conservation Value Forest Fiber.
- (c) 100% plantation wood for its pulp production.
- (d) 100% Sustainable Forest Management (SFM) certified pulpwood.
- (e) Maintain a sustainable proportion of recovered Fiber in addition to renewable virgin Fiber.



EMISSIONS

- (a) Reduce the impact of mills air emission.
- (b) Reduce the impact of water effluent.



SOLID WASTE

Reduce solid waste to landfill.



WATER MANAGEMENT

Improve management of water use in line with the UN Global Compact CEO Water Mandate program.



REFORESTATION

Support the national target for reforesting degraded land.



CONSERVATION AND BIODIVERSITY

- (a) Support the national target to preserve designated protected and conservation areas.
- (b) Support the national target to increase the endangered species population.



CLIMATE CHANGE

- (a) Reduce Carbon Emission in APP mills in line with the national target from Business As Usual by 2020.
- (b) Support Carbon Emission reduction effort in the APP supply chain in line with the national target from Business As Usual by 2020.



HUMAN RIGHTS

Ensure that APP's and its suppliers' operations are in line with national and international standard of human rights.



EMPLOYEE WELFARE

- (a) Provide a Healthy & Safe work environment for APP employees.
- (b) Maintain employee satisfaction to ensure that APP attract and retain talented and competent people.



COMMUNITY EMPOWERMENT AND WELFARE

- (a) Improve Procedure for Community Engagement & Conflict Resolution in APP mills.
- (b) Increase the number of communities that can benefit from APP's social programs and improve their effectiveness.







INDIGENOUS PEOPLES

Adopt international guidelines for the protection of indigenous people's customary rights in the forest.

FORESTRY GOALS - ACHIEVED



Goal	Progress Update		
100% independent third party verification for pulpwood legality	Achieved	Accelerated progress and achieved by end 2012	
100% sustainable plantation wood for pulp by 2015	Achieved	Elimination of MTH entering production process since 2015	
Zero Fibre from High Conservation Value Forest	Achieved	All conversion of natural forest was halted in 2013 SERA system is implemented	
Adopt international guidelines for the protection of indigenous people's customary rights in the forest	Achieved	<ul style="list-style-type: none"> - Implementation of Free Prior Informed Consent (FPIC) - Responsible Conflict Management - Implementation of HCV 5 & 6 through ISFMP 	

FORESTRY GOALS – ON TRACK



Goal	Progress Update		
100% Sustainable Forest Management (SFM) certified pulpwood	Achieved	100%	✓

” Steady progress disclosed each year

” 2012: 57%

” 2016: 99%

” 2017: 100%

	Ha	%
Total area (a)	2,587,224	
IFCC Certified		86%*
LEI SFM Certified		83
PHPL Certified		100

* Maximum area eligible to be IFCC certified is 97% due to 2010 cut off date

FORESTRY GOALS – ON TRACK



Goal	Progress Update		
Maintain a sustainable proportion of recovered fibre in addition to renewable virgin fibre	On track	In 2016 36% of our fibre was from recycled sources	✓

- “ Proportion range consistent year on year
- “ Additional context is provided within the Sustainability Report, explaining that the goal is not to achieve 100%. APP must maintain a mix between virgin and recycled fibre in order to meet manufacturing and product requirements and market demand

FORESTRY GOALS – ON TRACK



Goal	Progress Update	
Develop and implement Integrated Sustainable Forest Management Plans (ISFMPs)	On track	ISFMPs had been completed for all 38 pulpwood suppliers' concessions and has been implemented since 2017.



- “ The first Independent Observer (IO) mechanism is implemented in OKI Region, South Sumatra (PT BMH, PT SBA, PT BAP) in November 2017
- “ Result is currently reviewed and follow up action is being developed
- “ Current document will be adjusted following the new peat regulation

FORESTRY GOALS – ON TRACK



Goal	Progress Update	
Support the national target to preserve designated protected and conservation areas	On track	APP continued our commitment through supporting the protection and restoration of natural forest inside AAP pulpwood suppliers' concession and outside concession through landscape approach



- “ Protect and restore identified degraded conservation area within APP pulpwood suppliers’ concession
- “ Through multistakeholder approach such as UNESCO MAB Program
- “ Through Belantara Foundation in ten priority landscapes in Sumatra & Kalimantan



FORESTRY GOALS – ON TRACK

Goal	Progress Update	
Support the national target to increase by 10% the population of 25 specified endangered species	On track	Dedicated conservation programmes focussed on 'umbrella species' of Orangutan, Elephant and Tiger conservation continue, with the support of NGOs and conservation specialists.




“ More detailed description of conservation programmes is included within APP Sustainability Report, such as development of monitoring tools, feeding pocket programs, conservation friendly plantation management, SMART Patrol, etc which lead to zero human-wildlife conflict since 2013

FORESTRY GOALS – ON TRACK



Goal	Progress Update	
Increase welfare of indigenous & local communities and maintain good relations	On track	Desa Makmur Peduli Api (DMPA) programme aiming to benefit 500 villages in the next five years. 191 villages were included into the programme as of March 2018



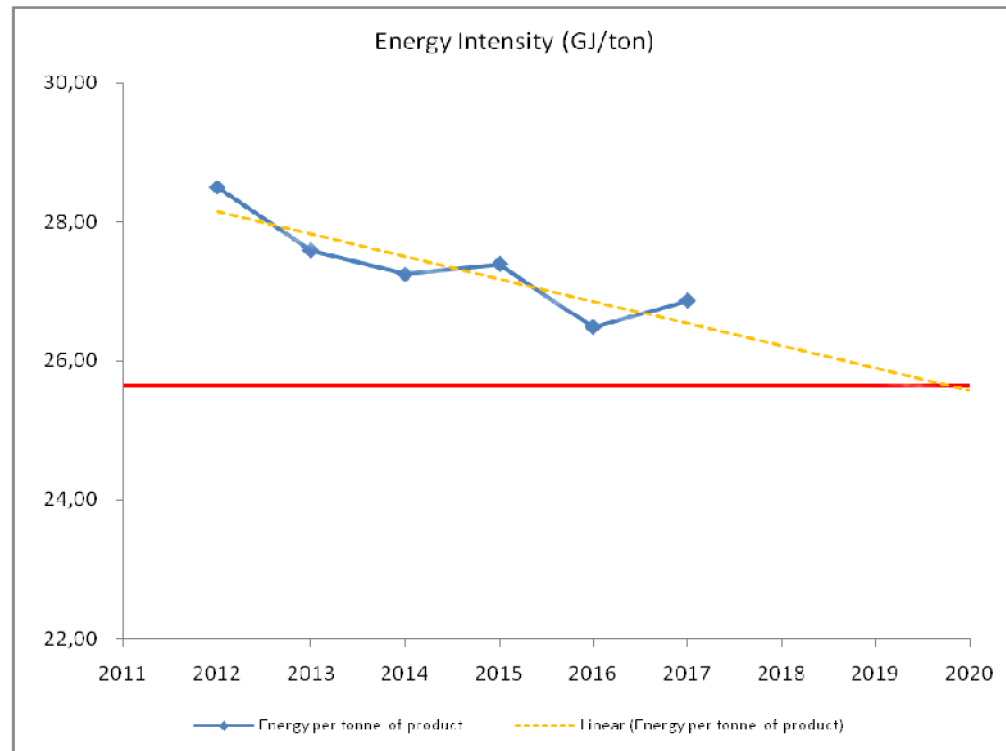
- “ Goal first disclosed in 2015 Sustainability Report
- “ In collaboration with various expert partners such as ICRAF/CIFOR, UGM, etc to increase program effectivity

Mills Operations -ENERGY – ON TRACK



Goal	Progress Update		
10% reduction in energy intensity by 2020, based on 2012 baseline	On track	Energy intensity decreased 5% in 2017	


- “ Implementation of ISO 50001 in all mills (require consistent energy reduction performance)
- “ Joint energy project with IDH in Pindo Deli mill achieved around 10% reduction
- “ Major investment for energy efficiency projects effective mostly 2018



Mills Operations –CARBON EMISSION – BEHIND

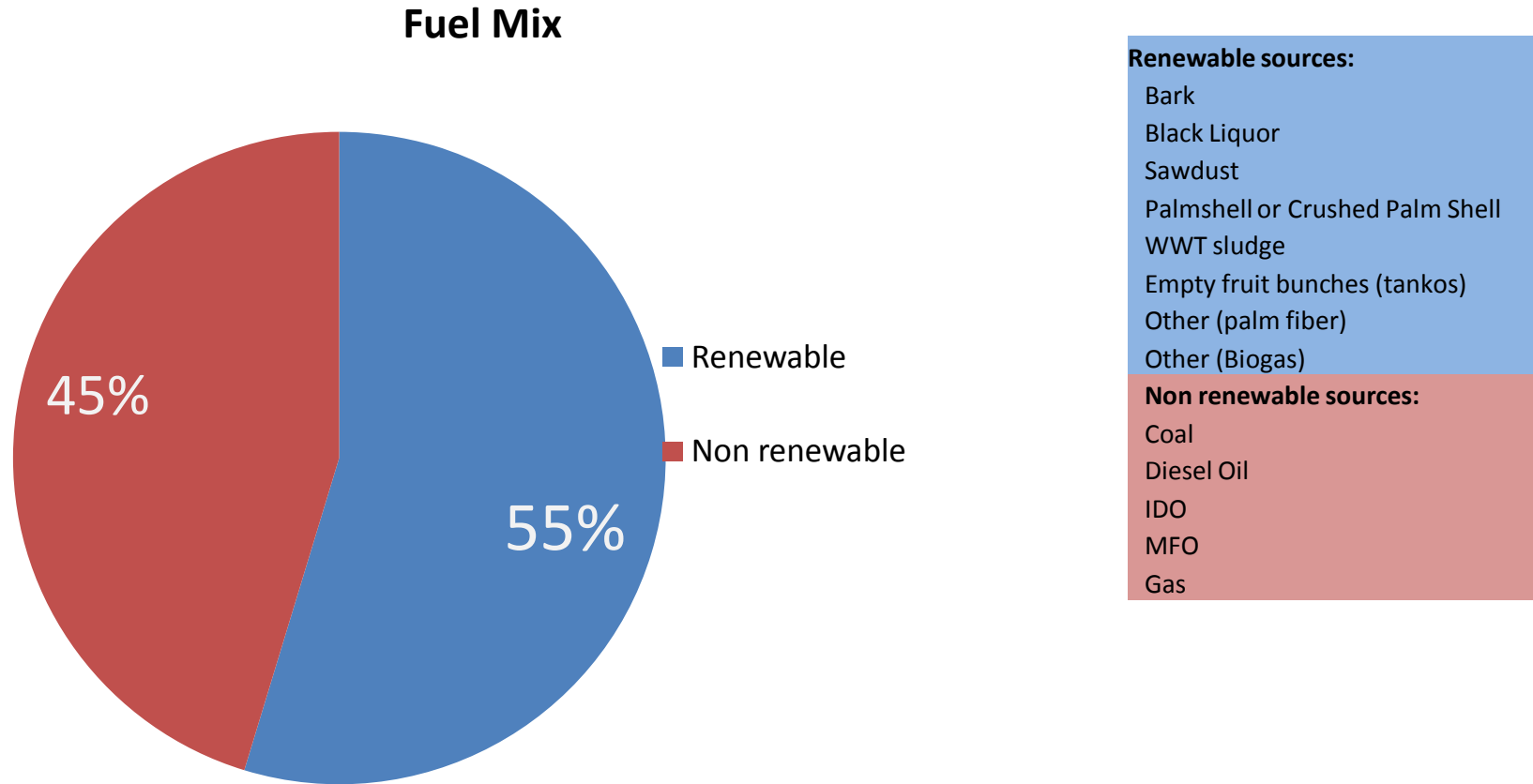


Goal	Progress Update	
10% reduction in carbon intensity by 2020, based on 2012 baseline	On track	Carbon Intensity decreased 15 % in 2017




” Significant increase in carbon intensity reduction is due to newly operated OKI Mill with almost **100% renewable fuels**

Mills Operations – ENERGY MIX



In 2017, **55% energy source** for producing APP paper products are derived from renewable sources

Mills Operations –AIR EMISSIONS – ON TRACK

Goal	Progress Update		
10% below national and/or regional limits for annual SOx and Nox	On track	All mills achieved in 2017	

- “ APP Report mill emissions as per Government requirements
- “ Results are both internal test and independent third party laboratory test
- “ Expect to continue to meet this goal each year through to 2020

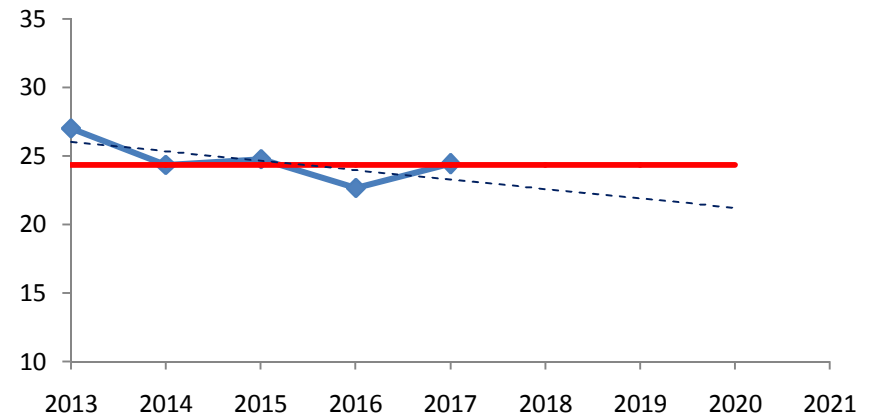
Mills Operations –WASTE WATER MANAGEMENT – ON TRACK



Goal	Progress Update		
10% below national and/or regional limits for COD and BOD	On track	All mills achieved in 2017	✓
Improve management of water use in line with the UN Global Compact CEO Water Mandate Programme	On track	Water footprinting completed in all mills	✓
Achieve 10% reduction in water intensity by 2020, based on 2013 baseline	On track	Water intensity decreased 15 % in 2017 compared to 2013	✓

- “ APP Report mill emissions as per Government requirements each year
- “ Results are both internal test and independent third party laboratory test
- “ Expect to continue to meet this goal each year through to 2020
- “ Water footprinting has now been completed in all mills ahead of the original commitment to complete by 2020 – met the goal for setting baseline
- “ Performance relatively consistent since 2012, showing downward trend in water intensity

Water Intensity (m3/ton)



Mills Operations –SOLID WASTE – ON TRACK



Goal	Progress Update		
25% reduction in solid waste to landfill, based on 2010 baseline	On track	34% reduction achieved in 2017	

- “ There were fluctuations related to availability of biomass. If more coal is consumed then solid waste goes to landfill may increase
- “ Currently efforts are directed toward exploring alternative usage of coal ash
- “ Performance in the past 5 years has been consistently achieve target

Mills Operations –EMPLOYEE WELFARE – BEHIND



Goal	Progress Update	
Zero employee and contractor fatalities, major fire incidents and traffic accidents on site	Behind	Not achieved in 2017



- “ Main challenge is contractor safety management for individual safety behavior
- “ At HQ level, H&S Team were developed end of 2015. **Safety Culture Program** has been implemented intensively ever since, with full support from Top Management

Fatalities	2017	2016	2015
Employee	2	1	3
Contractor	7	7	10

- “ This include **revitalization of mills’ safety team & safety procedures, real time accident alert**, accident investigation and follow up actions significantly strengthened
- “ Implementation of **CSMS, strict sanctions for violations** of safety procedures and **termination** for contractors with fatality case

VISION 2020 - TIMELINE



THANK YOU!