

# KEY FIGURES – ENVIRONMENT AND ENERGY

## ENVIRONMENTAL DATA 2018-2016

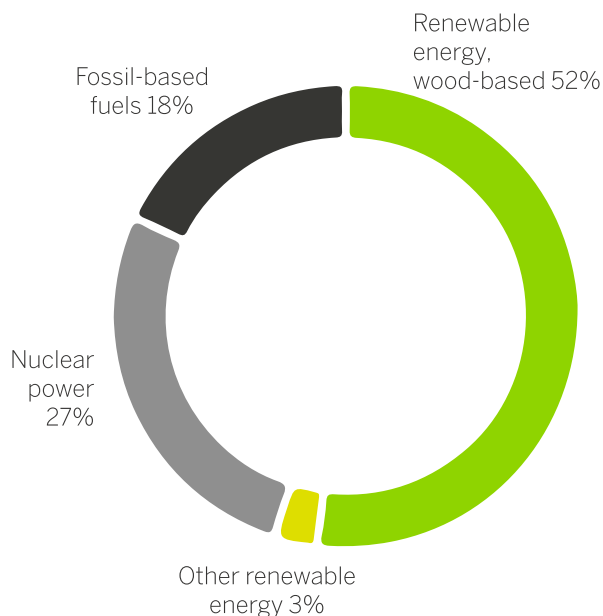
<b>PRODUCTION, 1,000 t</b>	<b>2018</b>	<b>2017</b>	<b>2016*</b>
Paperboard (2016 includes also paper)	1,866	1,817	1,731
Chemical pulp and CTMP	1,363	1,330	1,236
<b>ENERGY, GWh</b>	<b>2018</b>	<b>2017</b>	<b>2016*</b>
Primary energy consumption	11,675	11,809	11,810
<b>WATER, 1,000 m<sup>3</sup></b>	<b>2018</b>	<b>2017</b>	<b>2016*</b>
Water sourcing	105,921	106,826	106,942
Waste water flow	65,662	67,920	69,533
<b>EMISSIONS TO AIR, t</b>	<b>2018</b>	<b>2017</b>	<b>2016*</b>
CO <sub>2</sub> , fossil (scope 1)	288,579	300,973	278,725
CO <sub>2</sub> (scope 2) market-based	189,000	223,428	259,843
CO <sub>2</sub> (scope 2) location-based	416,789	361,652	275,885
CO <sub>2</sub> , biogenic	1,837,299	1,914,832	1,881,238
Sulphur as SO <sub>2</sub>	536	556	477
Nitrogen oxides as NO <sub>2</sub>	1,506	1,872	1,792
Particles	299	347	139
<b>DISCHARGES TO WATER, t</b>	<b>2018</b>	<b>2017</b>	<b>2016*</b>
COD	9,954	11,470	11,557
BOD	293	391	534
AOX	55	52	45
Total phosphorus	19	23	24
Total nitrogen	161	175	190
Total suspended solids	1,600	1,903	1,925
<b>WASTE, t</b>	<b>2018</b>	<b>2017</b>	<b>2016*</b>
Total waste	167,383	148,618	134,549
Utilised of total waste	164,626	145,495	131,723
Utilised as materials (recycling)	66,384	43,904	56,753
Utilised as energy (incineration)	98,242	101,591	74,970
Landfilled	1,611	1,826	2,164
Hazardous waste	1,146	1,297	662

\* During 2016 Metsä Board discontinued fine paper and wallpaper base businesses, and from 2017 onwards the company has focused on paperboard and pulp production only.

# ENERGY CONSUMPTION AND SOURCING 2018

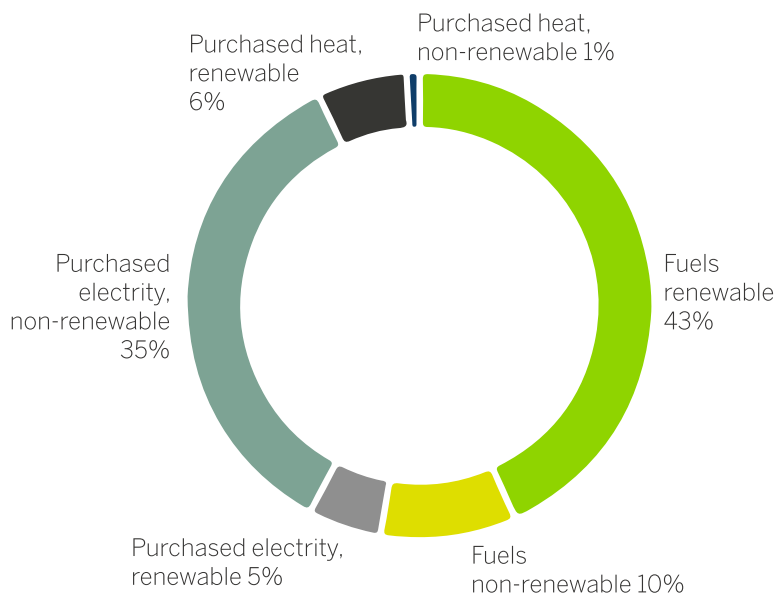
## TOTAL ENERGY CONSUMPTION IN 2018

(as primary energy), 11.7 TWh



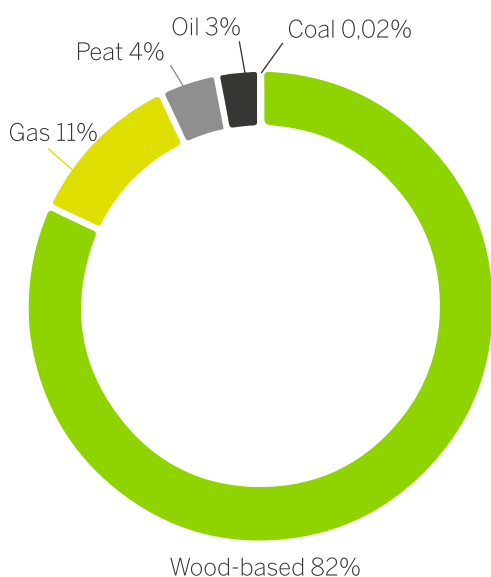
## ENERGY SOURCED IN 2018

(as primary energy), 11.7 TWh

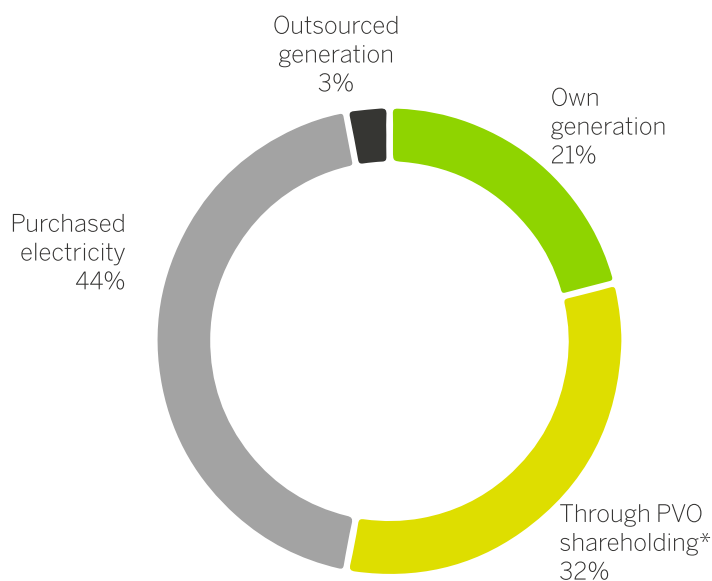


Total energy consumption is expressed as primary fuel consumption and calculated assuming 40% energy efficiency for purchased electricity production and 85% energy efficiency for purchased heat production.

## FUEL CONSUMPTION IN 2018, 7.0 TWH



## ELECTRICITY SOURCED IN 2018, 2.4 TWH



\* Pohjolan Voima Oyj is a non-listed public limited liability company. It supplies electricity and heat for its shareholders at cost price. Metsä Board's shareholding in PVO is 3.2%.