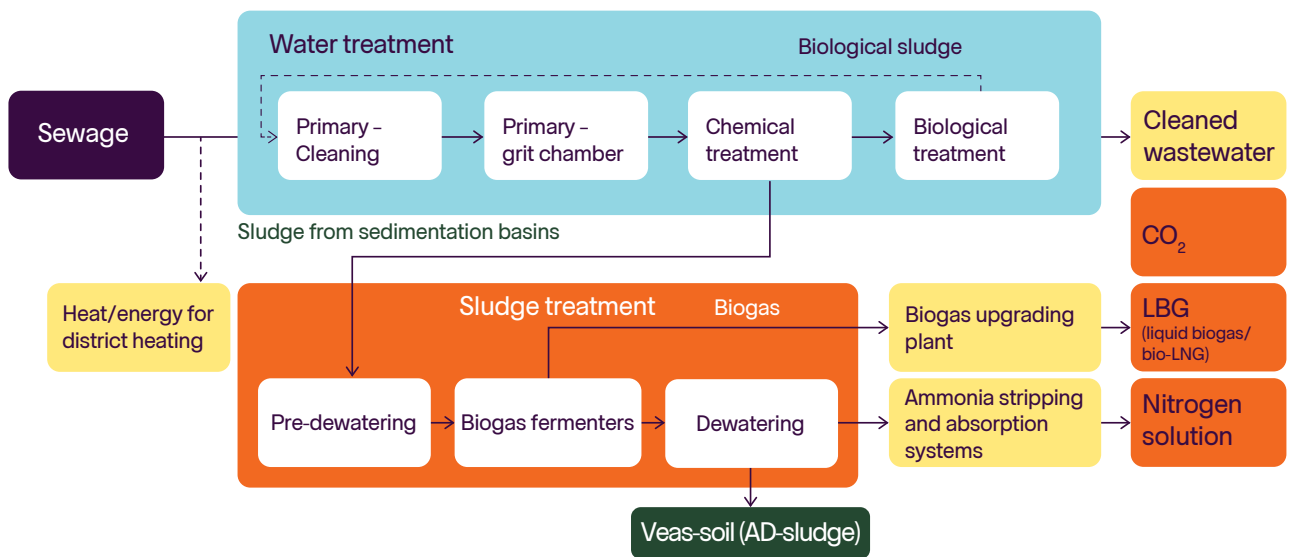


# Veas in brief

Veas is Norway's largest wastewater treatment plant and treats sewage water originating from Oslo, and nearby municipals, corresponding to 867,000 person equivalents. Annually the plant produces approximately 100 million m<sup>3</sup> of treated sewage water, 40,000 tonnes of stabilized and sanitized bio-fertilizer, 60 GWh of biogas and 4,000 tonnes of a nitrogen solution. Veas is owned by the municipalities of Oslo, Bærum and Asker.

Produced biogas is refined and liquefied to bio-fuel (bio-LNG) at the new refining plant, in operation from the summer of 2020. This plant will, at full operation, produce bio-fuel equivalent to approximately 6 million liters of diesel which upon replacing fossil fuels will reduce greenhouse gas emissions by more than 15,000 tonnes of CO<sub>2</sub> equivalents per year.



## Purification requirements and results 2021

Parameter	Wastewater Treatment Regulations excluding overflow	Requirement		Result	
		Discharge permit including overflow	Excluding overflow	Including overflow	
	%	%	%	%	%
NITROGEN	70	70	72,7		72,6
PHOSPHORUS	90	90	93,4		93,2
COD*	75		86,5		86,2
BOC <sub>5</sub> *	70		92,0		91,4

\* Organic substance measured as: COD = Chemical Oxygen Demand and BOC5 = Biological Oxygen Consumption over 5 days.

# Key figures 2021



## Finances

**40.4**

Revenue from sales of products and services (NOK million)

**223**

Transfer from the owners to operations (NOK million)

**94.1**

Transfer from the owners to financing (NOK million)

**271.2**

Operating costs excluding depreciation (NOK million)

**4**

Result (NOK million)

**182**

Investment for the year (NOK million)



## Production

**87.4**

Purified wastewater, mill. m<sup>3</sup>

**41,400**

Veas soil, tonnes

**4,543**

Nitrogen solution, tonnes

**10.9**

(amount, mill. Nm<sup>3</sup>) Biogas

**57.8**

(energy content, GWh) Biogas

**111**

Delivered to district heating, GWh

**49.9**

Produced bio-LNG, GWh



## Resource consumption

**43.6**

Electrical power, GWh

**266,055**

Renewable fuel oil, litres

**3,543**

Wood pellets, tonnes

**17,954**

Drinking water, litres

**21,757**

Chemicals, tonnes

**-11.5**

Net energy balance, GWh



## Residual products

**819**

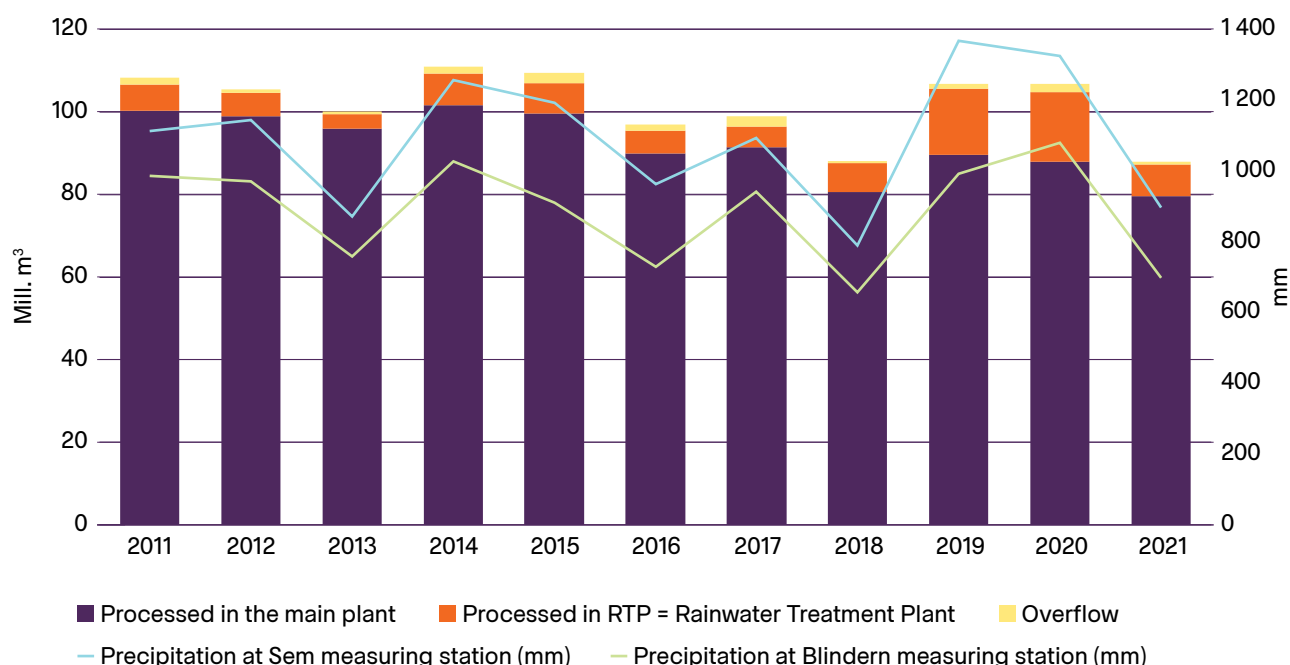
Trash from screens, tonnes

**256**

Sand, tonnes

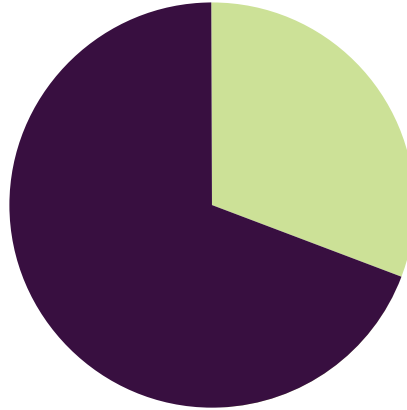
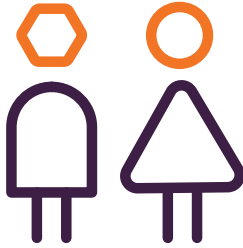
**Veas' services cost you nok 1 NOK per day.**

## Development in amounts added and precipitation



# Our people

102 employees



67 %

68 men

33 %

34 women

Sick leave rate

1.4 %

Selfdeclared

3.5 %

With medical certificate

43

Average age of employees

## Veas and HSE

In 2021, H1 and H2 values were 6. The goal is an H1 value below 10 (work-related injuries without absence and work-related injuries with absence).

Year	H1 and H2 values
2018	13.7
2019	0
2020	6.1
2021	6

H1 - work-related injuries with absence per million hours worked

H2 - work-related injuries with absence and work-related injuries without absence per million hours worked

## Area of competence, Employees

