



# Environmental regulation of industry in Norway

## Case: Norske Skog Saugbrugs AS

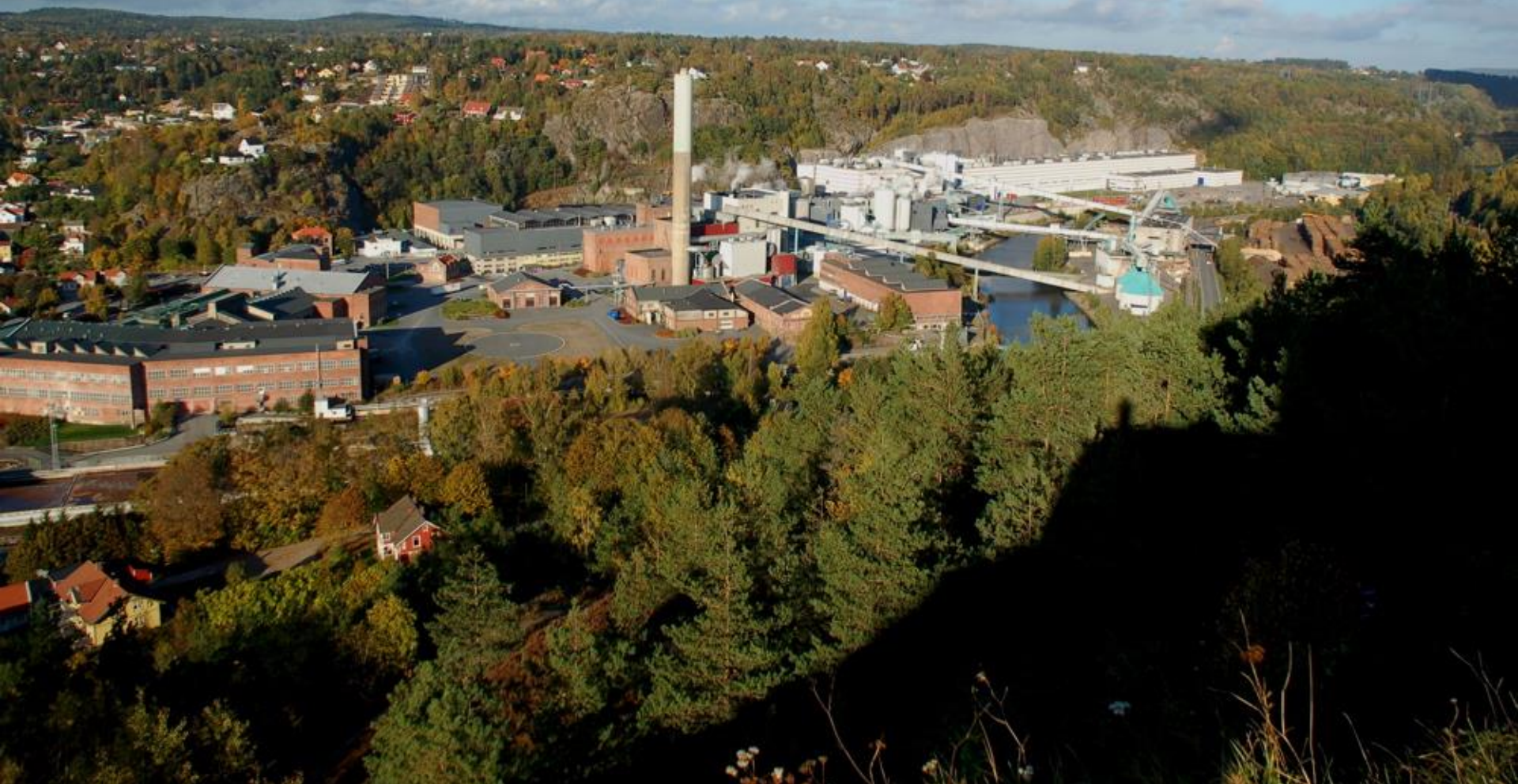
Olaug Bjertnæs, June 11, 2014

## Production

- Thermo mechanical pulp 400000 tonnes per year
- Magazine paper 630 000 tonnes per year

## Energy production (steam)

- Bioenergy 70 MW
- Oil 2 boilers of 80 MW



Licence, 3 June 2003

- Internal control
- Risk evaluation, emergency preparedness
- Energy efficiency
- Limit values for emissions to air, water and noise
- Waste handling
- Land fills

~~Without  
permission~~

## Pollute

### Exceptions:

Fisheries

Agriculture

Forestry

Housing

Schools

Business Premises

Temporary

Construction work

Etc.

### Permission

Individual  
licence

Regulations

# Legal basis

## Acts:

- The pollution control act
- The product control act
- The greenhouse gas emission trading act

Regulations connected to the acts

EU directives and regulations

International Conventions and agreements





# Permitting process in Norway

1. Application from the company



4. The Norwegian Environment Agency issues the permit based on:

- application

- comments received

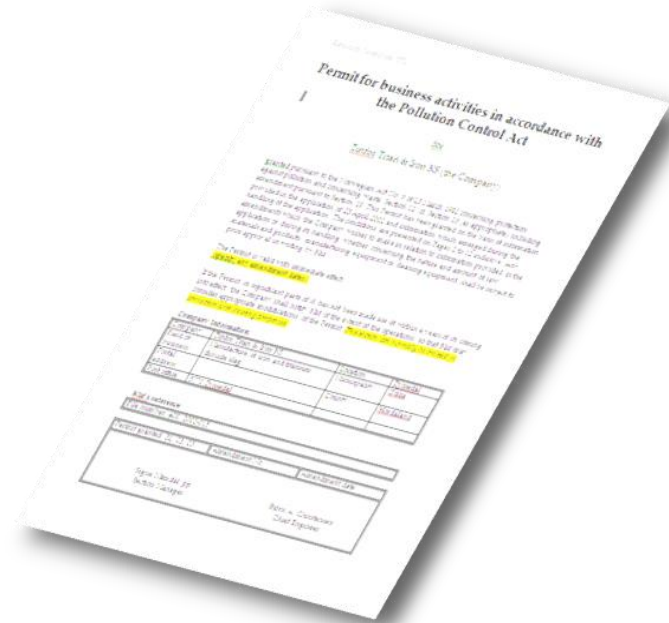
judgements

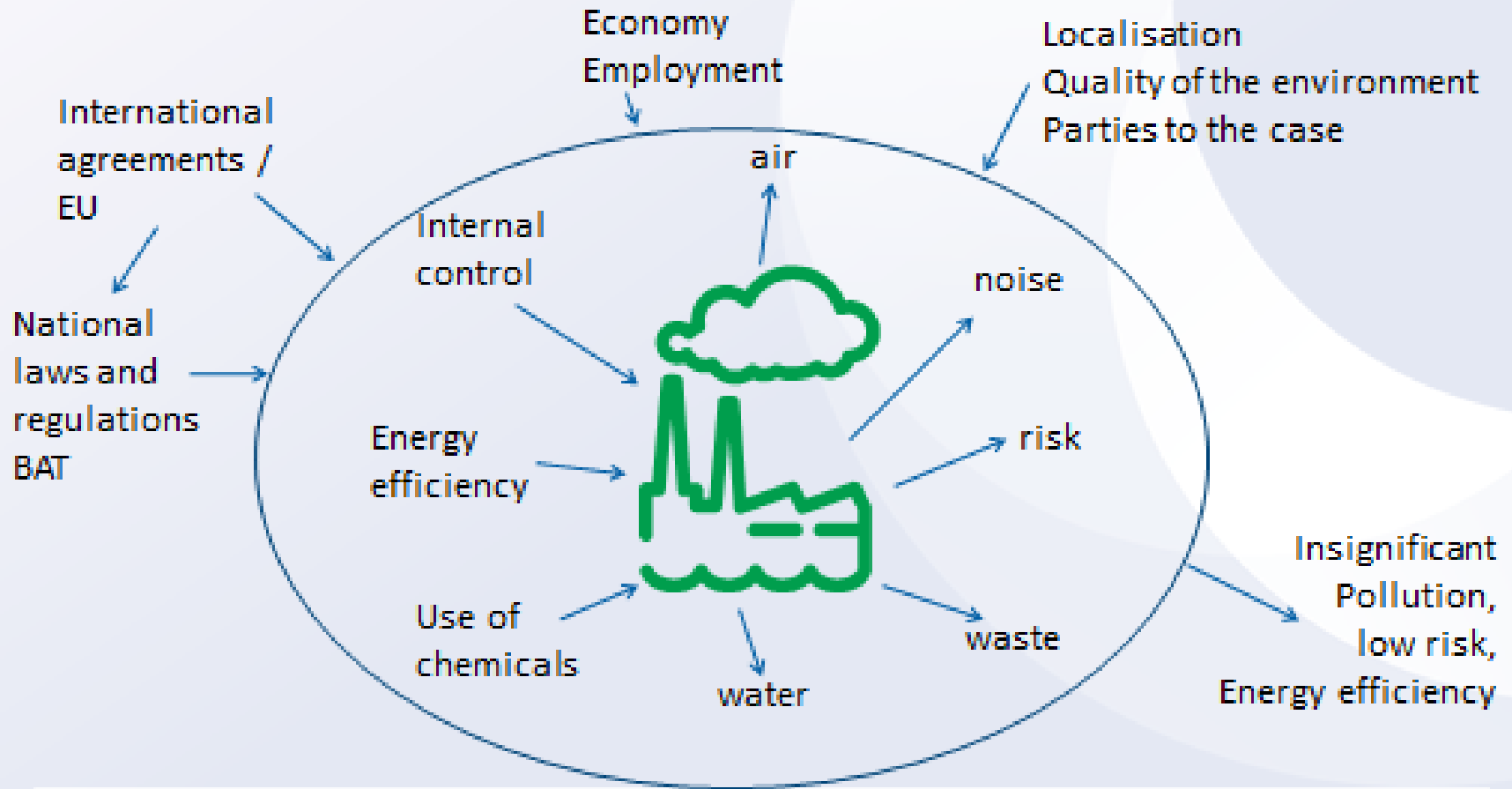


2. Public hearing



3. Affected parties give their comments





Future without pollution

Licence

# Environmental Management Systems

ISO	EMAS	Internal control
International Voluntary	Europe only Voluntary	Norway only Mandatory
External environment only	External environment only	Covers all health, environment and safety
Obligates continual improvement	Obligates continual improvement	Main goal is to comply with laws and regulations
No demand on publishing of data	Demands publishing of data, reports etc.	Data available on demand
Demands on organisation and practice	Demands on organisation and practice	Demands employees participation during introduction and practice
-	Public register	-



Kvotemyndighet: Miljødirektoratet

Petroleumsvirksomhet til  
havs

Transport

fylke

kommune

**Utslipp**

Avfall

Akutt forurensning

Energiforbruk

Produksjonsforhold

Klimakvoter

Tid

2002

2012

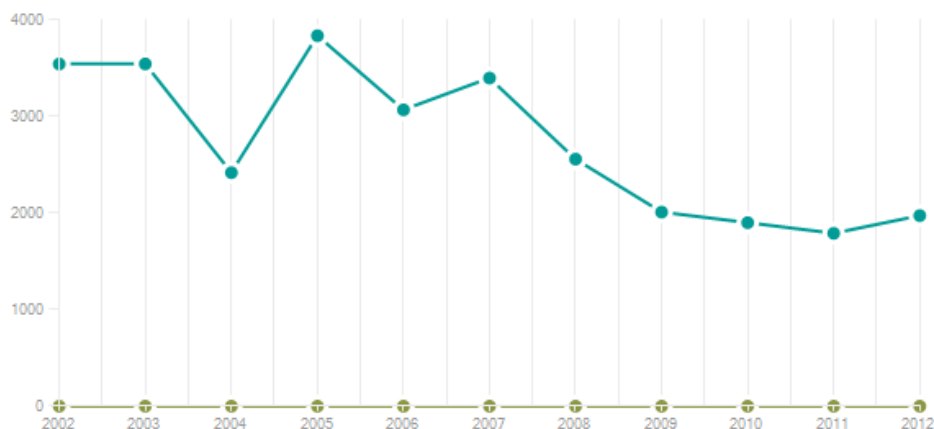
Sammenlign med...

landbasert industri innen et [geografisk område](#), [bransjen](#) eller en [virksomhet](#).

## Utslipp av Kjemisk oksygenforbruk (KOF) (i tonn per år)

Norske Skogindustrier ASA, Saugbrugs

(tonn)



### Visningsvalg

- Til luft ☁
- Til vann 🌊

### Type

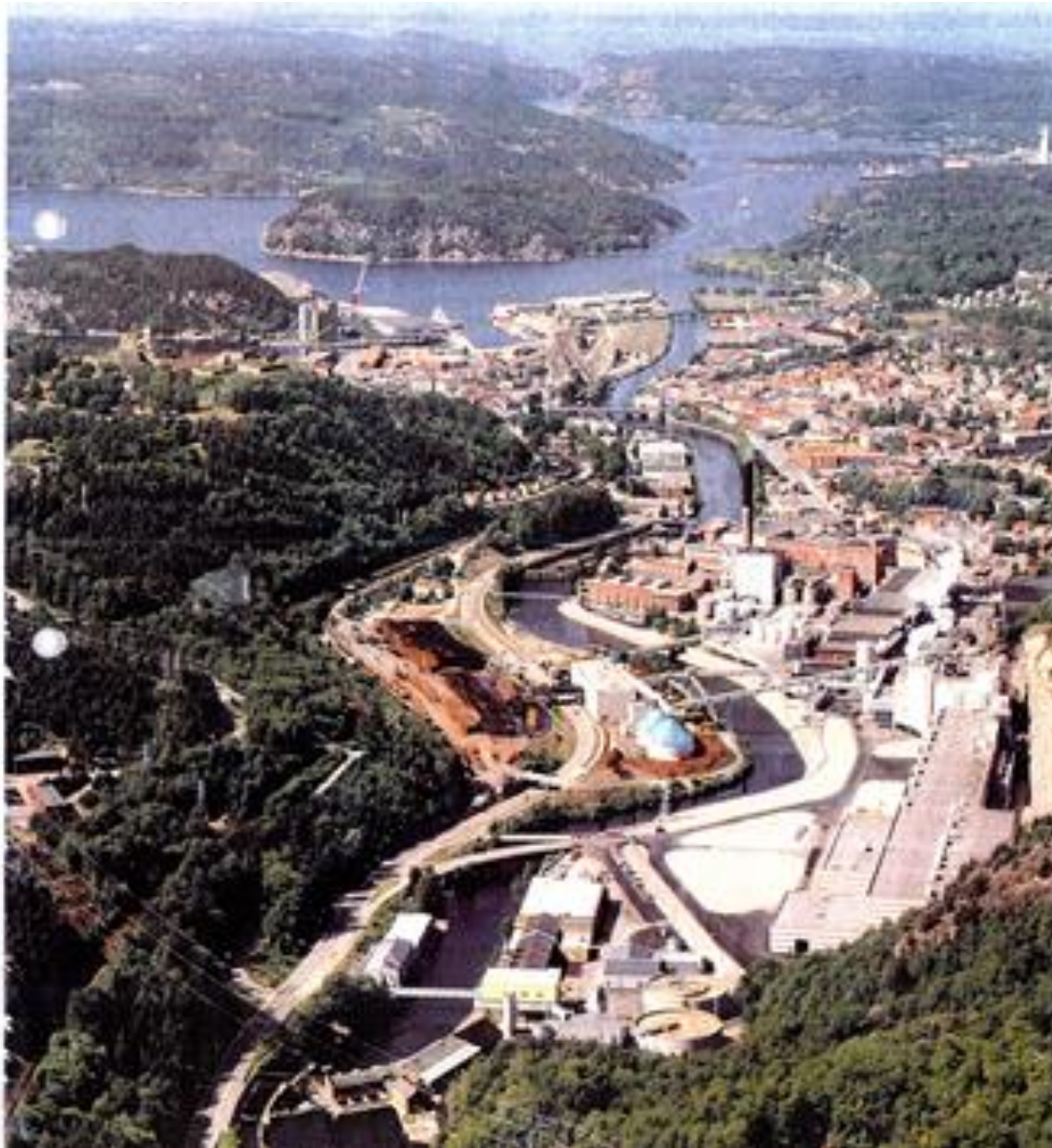
- Dioksiner i toksiske ekvivalenter (Dioksin)
- Flyktige organiske forbindelser (VOC)
- Fosfor totalt (P-TOT)
- Heksaklorbenzen (HCB)
- Karbondioksid (CO2)
- Karbondioksid biomasse (CO2 (B))
- Karbondioksid fossilt (CO2 (F))
- Karbonmonoksid (CO)

### Kjemisk oksygenforbruk (KOF)

- Klimagasser (CO2-ekv)
- Lystgass (N2O)
- Metan (CH4)
- Nitrogen totalt (N-TOT)
- Nitrogenoksider (NOx)
- Partikulært utslipp til luft fra industri (INSTOV)
- Svoveldioksid (SO2)
- Tørstoff, suspendert (SS)

### Norske Skogindustrier ASA, Saugbrugs : Utslipp av Kjemisk oksygenforbruk (KOF) (i tonn per år)

År	Til luft ☁ (I.R.)	Til vann 🌊
2002	(I.R.)	3 540,00
2003	(I.R.)	3 540,50
2004	(I.R.)	2 416,00
2005	(I.R.)	3 832,50
2006	(I.R.)	3 066,00
2007	(I.R.)	3 394,50
2008	(I.R.)	2 555,00
2009	(I.R.)	2 007,50



Future with

Norske Skog  
Saugbrugs AS



MILJØ-  
DIREKTORATET

## Norske Skog Saugbrugs AS

### Main challenges:

- Keeping up their performance in a difficult economic situation.
- Keeping a good dialogue with neighbours