



# Innovasjon, klimaendringer og endringer i kjemikaliebruk

Hanne Jensen, R&D Manager Biology Jotun A/S

## Agenda

- Jotun protects property  
Jotun Green Steps
- Effect of climate changes
- Challenges for the future
- Innovations



# **Jotun Protects Property**

## **Jotun Green Steps**



Jotun Protects Property

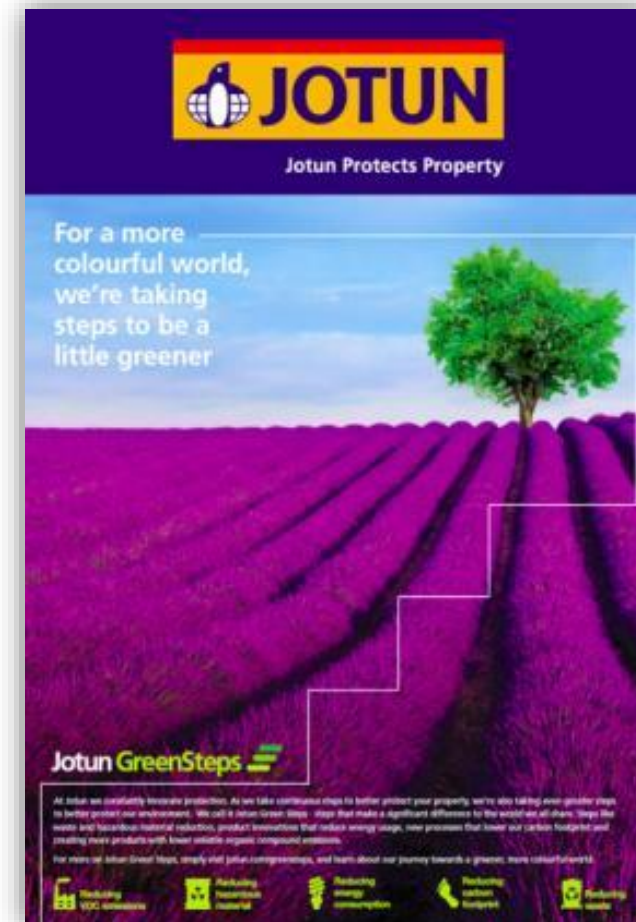
# Jotun Protects Property



For kjente landemerker. Og ditt hjem.

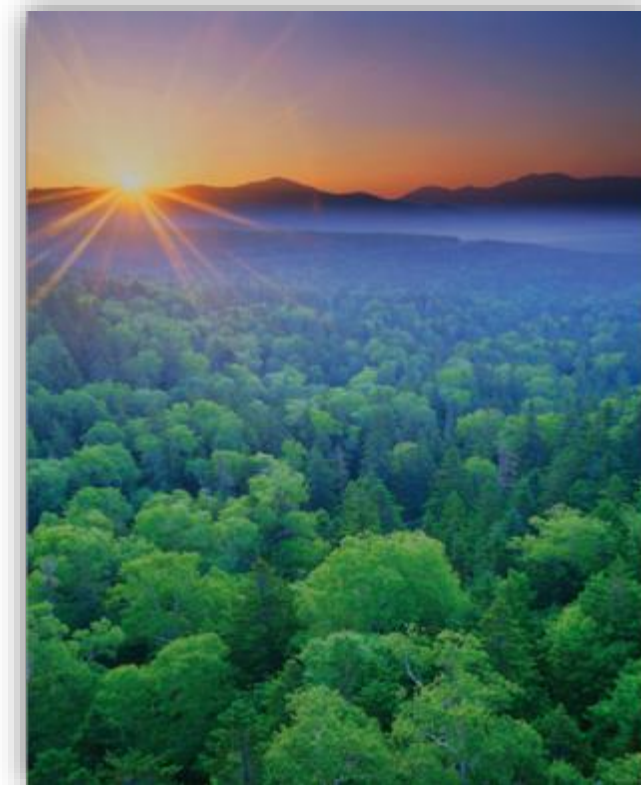
# Jotun GreenSteps

- Environmental commitment
  - *“Jotun shall contribute to the environment and strengthen its position, business and reputation by developing and offer competitive, sustainable products and solutions in the entire value chain”*
- Jotun contributes to the environment by offering coatings that protect property from wear and tear
- Jotun takes steps to protect property and the world around it



# Jotun GreenSteps - focus areas

1. Reduction of solvent/VOC emissions
2. Reduction/substitution of hazardous materials
3. Reduction of energy consumption
4. Reduction of carbon footprint
5. Reduction of waste



Reducing  
VOC emissions



Reducing  
hazardous  
materials



Reducing  
energy  
consumption

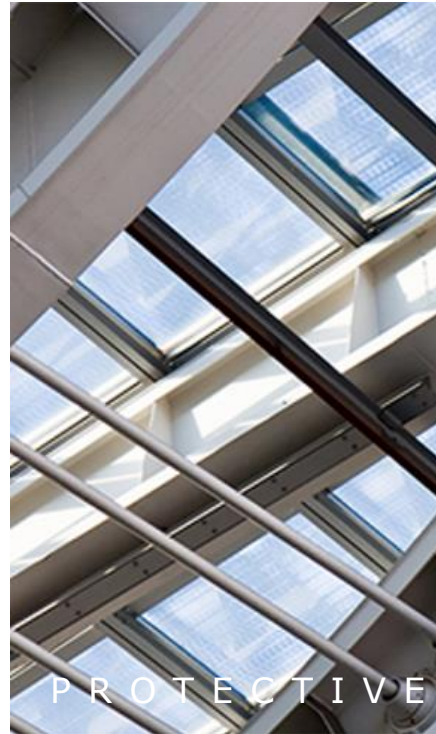


Reducing  
carbon  
footprint

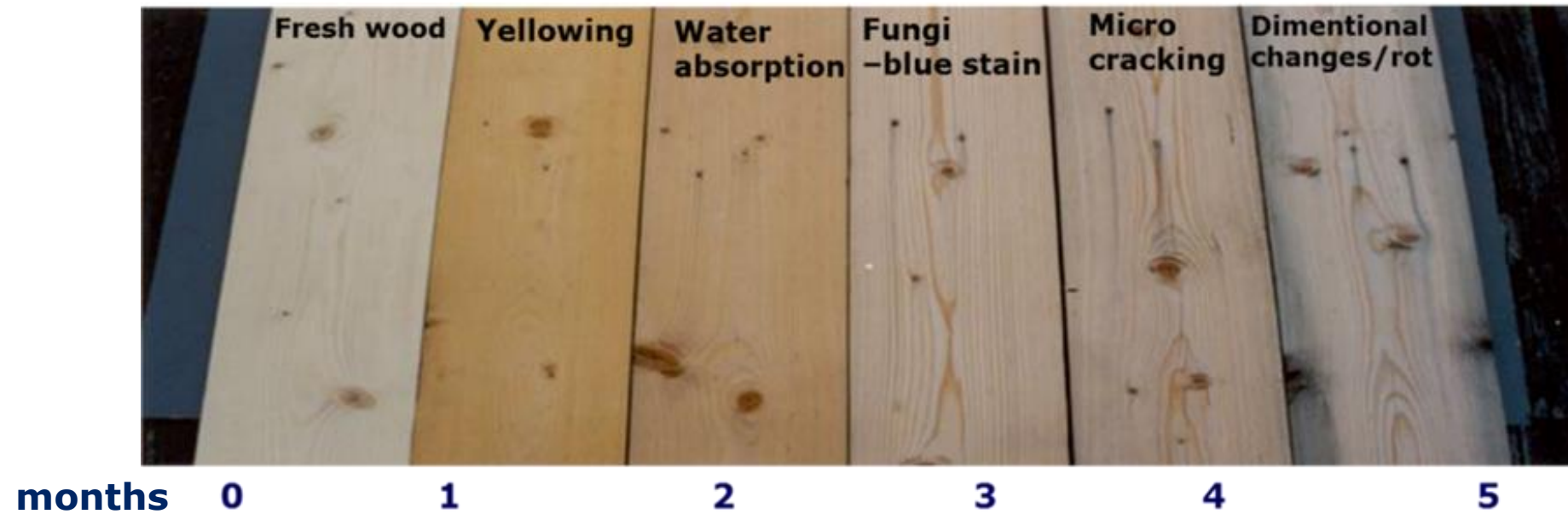


Reducing  
waste

# Jotun Protects Property in four segments

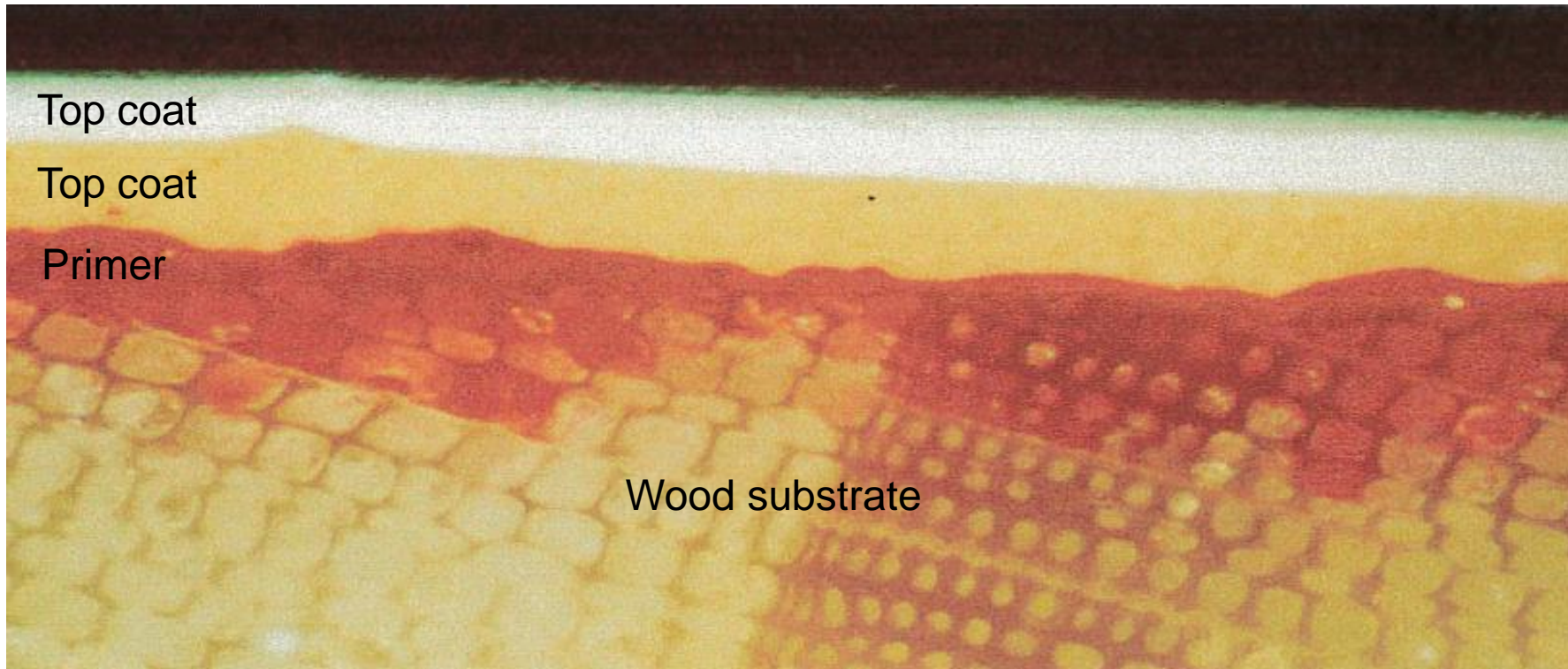


# Wood degrades quickly if untreated outdoors





## Wood coating system: Primer and top coats



# Jotun Protects Property Wooden houses in Scandinavia



# Effect of climate changes



Jotun Protects Property

# FREMTIDENS VÆRVARSEL







**Dry-film biocides are essential for wood coatings**

Std

A5

A6

A71

## Other reasons for increased biological growth on wood coatings

- More environmentally friendly biocides
- Modern heat insulation
- Modern building techniques



Photo: Lone Ross Gobakken

## Other reasons for increased biological growth on wood coatings

- More environmentally friendly biocides
- Modern heat insulation
- Modern building techniques





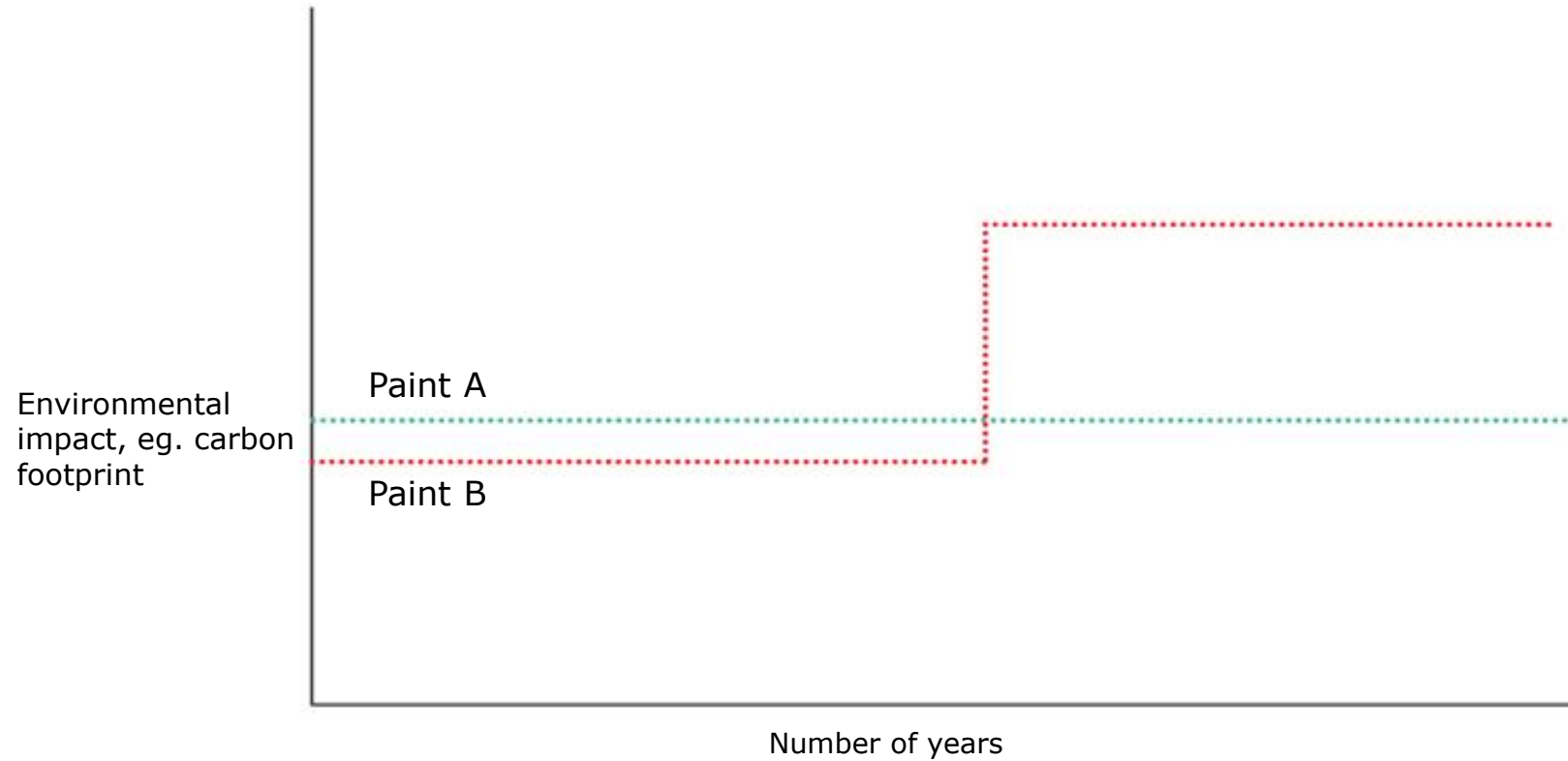
# Biological growth on wood coatings shortens the service life

- Aesthetical problem
- Damage of the coating and substrate
- Shorter service life and increased use of non-renewable materials
- Decrease property value



# Sustainability vs. quality

Quality is the most important factor for sustainability



# Challenges for the future



Jotun Protects Property

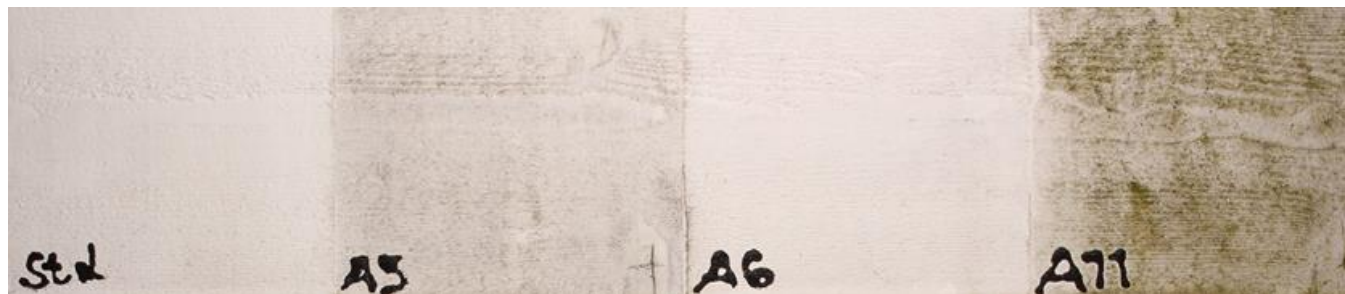
## The future is uncertain for essential dry-film biocides!

- Lack of holistic approach
- Evaluation of hazard, not risk
  - Exclusion criteria
  - Low SCL for isothiazolinones

### **PT7 dry film preservatives on the Article 95 list:**

**31** active ingredients on the list

**10** are compatible in paint – not enough options for the future (DIY)!



## Concerns for the isothiazolinones

Active substance	Application	Typical dosage (ppm)	Concern for future availability
OIT	Fungicide (PT6 and PT7)	500-1000	SCL 15 ppm
DCOIT	Fungicide (PT7)	1000-2000	SCL 15 ppm



# Concern that CIT/MIT will set precedence!

L 25/48

EN

Official Journal of the European Union

2.2.2016

## COMMISSION IMPLEMENTING REGULATION (EU) 2016/131

of 1 February 2016

approving C(M)IT/MIT (3:1) as an existing active substance for use in biocidal products for product-types 2, 4, 6, 11, 12 and 13

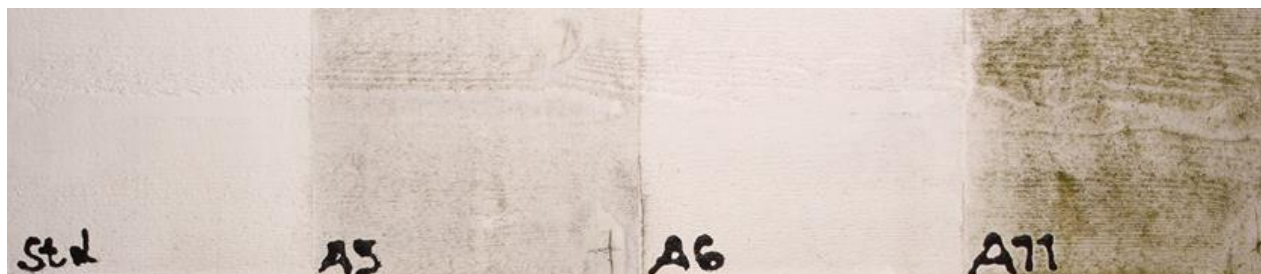
(Text with EEA relevance)

The placing on the market of treated articles is subject to the following conditions:

- (1) In view of the risks identified for human health, mixtures treated with or incorporating C(M)IT/MIT (3:1) and placed on the market for use by the general public shall not contain C(M)IT/MIT (3:1) at a concentration triggering classification as skin sensitiser, unless exposure can be avoided by other means than the wearing of personal protective equipment.

## Concerns for other essential biocides

Active substance	Application	Concern for future availability
ZnPT	Fungicide (PT7)	<b>Exclusion criteria</b>
IPBC	Fungicide (PT7)	Not compatible in all products: yellowing and tear gas
Carbendazim	Fungicide (PT7)	Only approved for industrial use. <b>Exclusion criteria.</b>
Propiconazole	Fungicide (PT7 and PT8)	<b>Exclusion criteria</b>
Tebuconazole	Fungicide (PT7 and PT8)	Same classification as Propiconazole?
Diuron	Algicide (PT7)	<b>Exclusion criteria</b>
Terbutryn	Algicide (PT7)	WFD, listed as priority substance
Isoproturone	Algicide (PT7)	Stop of support under PPR. WFD, listed as priority substance



## The future for dry-film biocides is uncertain!

- Will there be enough options for sufficient dry-film preservation?
- Will there be a ban of products with dry-film biocides?





# Innovations



Jotun Protects Property

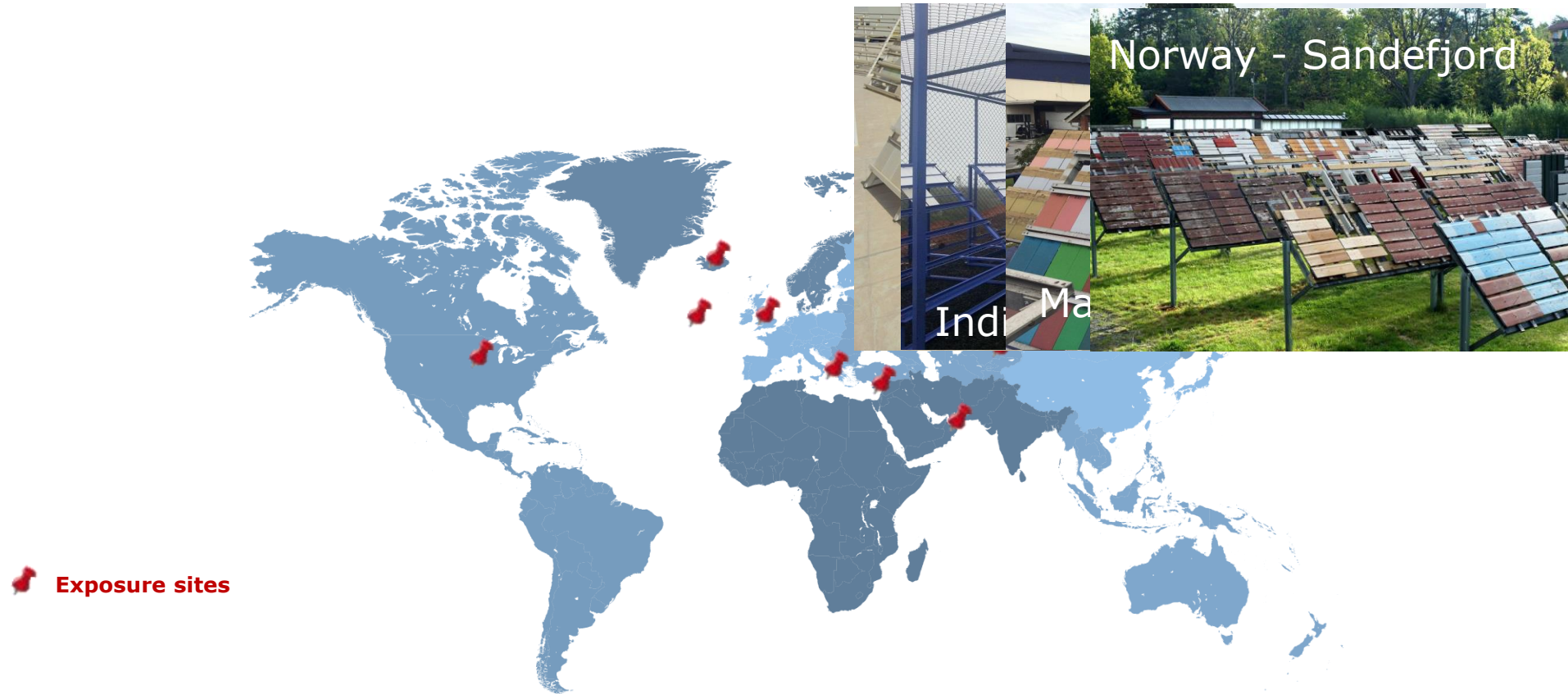
# Innovation in Jotun

From implicit needs to the perfect finish on the wall

1. Insights and ideas
2. Concept development
3. Detailed product specification
4. Product development
5. Testing
6. Launch



# Jotun Decorative Paints outdoor exposure sites



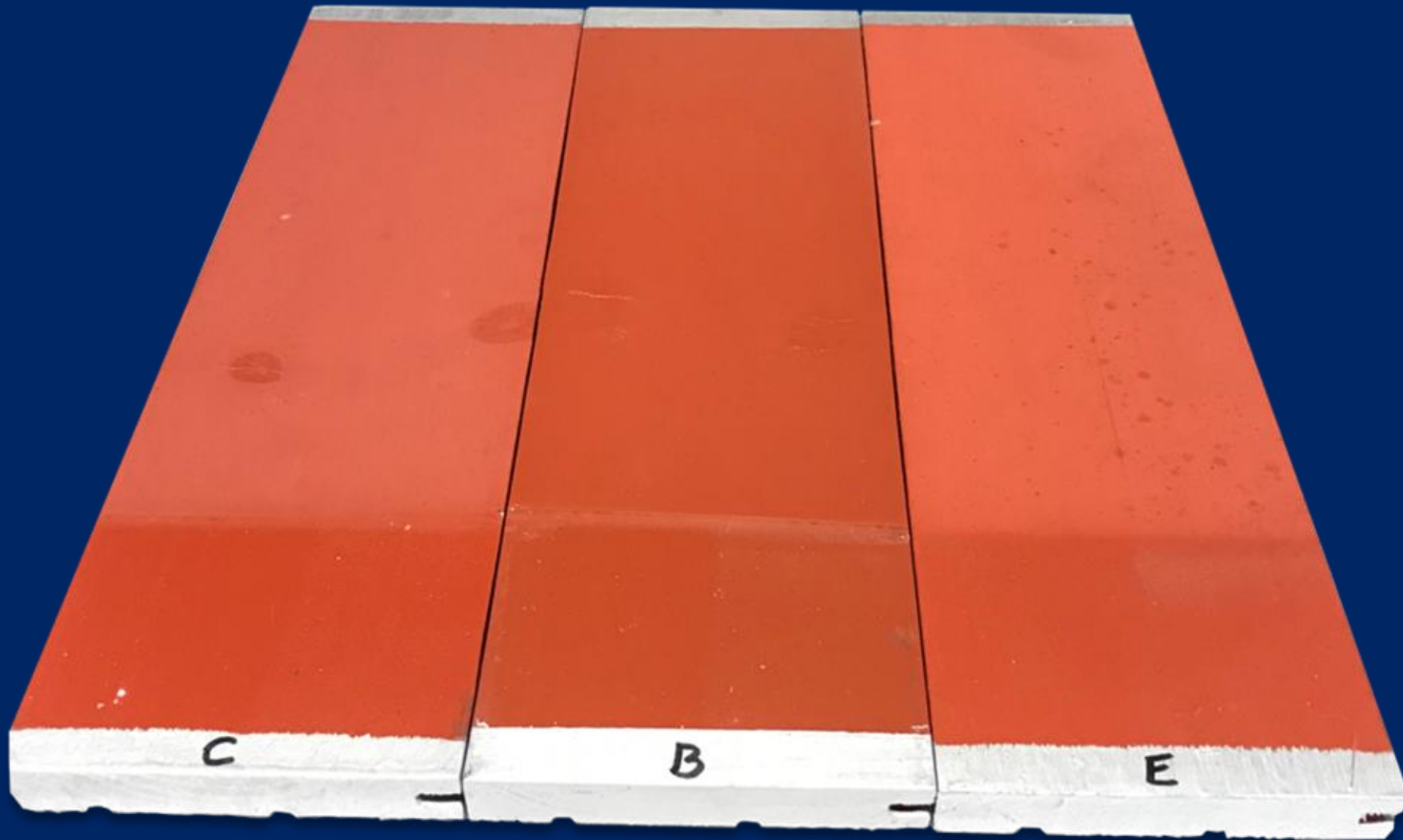
# Products for the Scandinavian market is tested under tough Nordic conditions




# Exposure in Florida speeds up the innovation process in Scandinavia

- Subtropical climate
- High UV load
- Frequent rain and high humidity
- 1 year in Florida corresponds to about 4 years on a facade in Norway



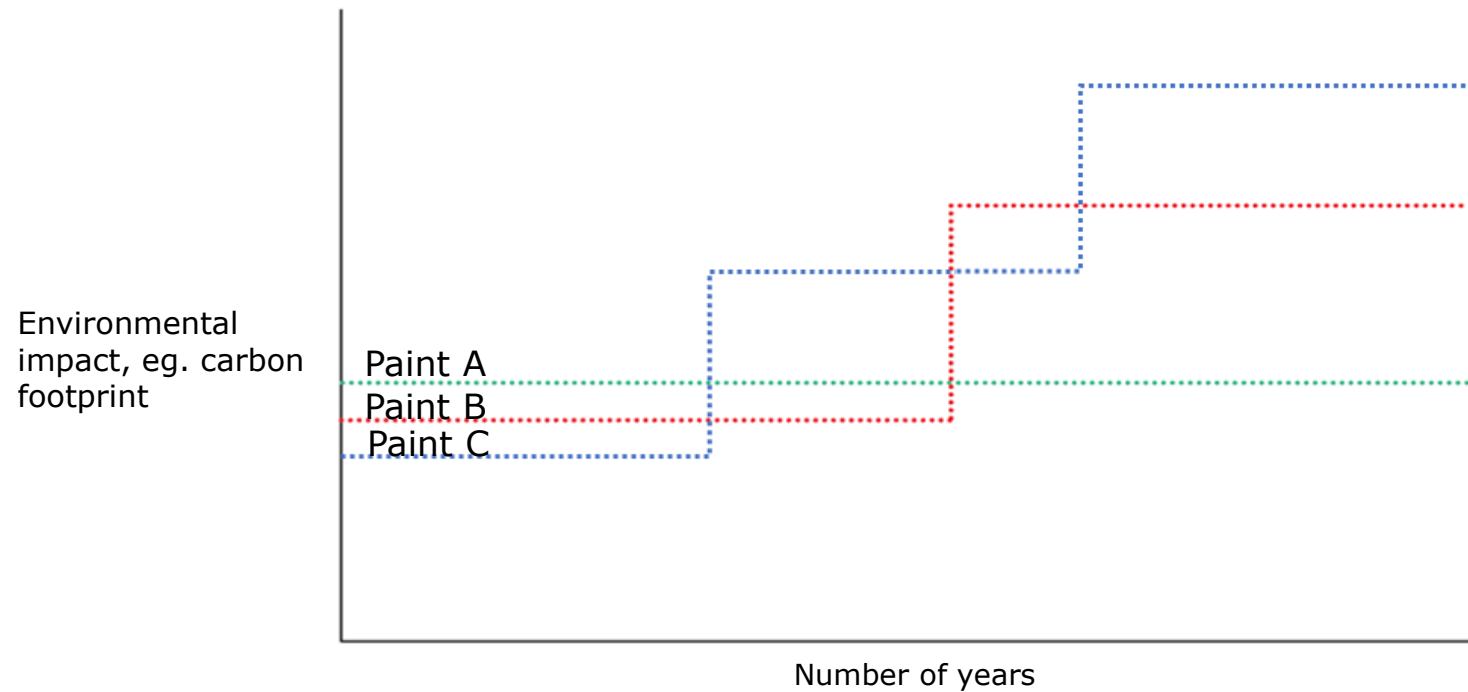




**Developing durable exterior products  
without dry-film biocides is impossible!**



# Dry-film biocides are essential for a sustainable future!







**Jotun Protects Property**