



NyeVeier

# Motorway Construction Remake Model

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*Ingrid Dahl Hovland, CEO Nye Veier*

# From small patches to long stretches

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*Ingrid Dahl Hovland, CEO Nye Veier*

# A brief history: Challenges in highway development in Norway



**Long planning and  
increased cost estimates**



**Approx. 100 % more expensive  
than budgeted**

**The construction period twice as  
long as Sweden**

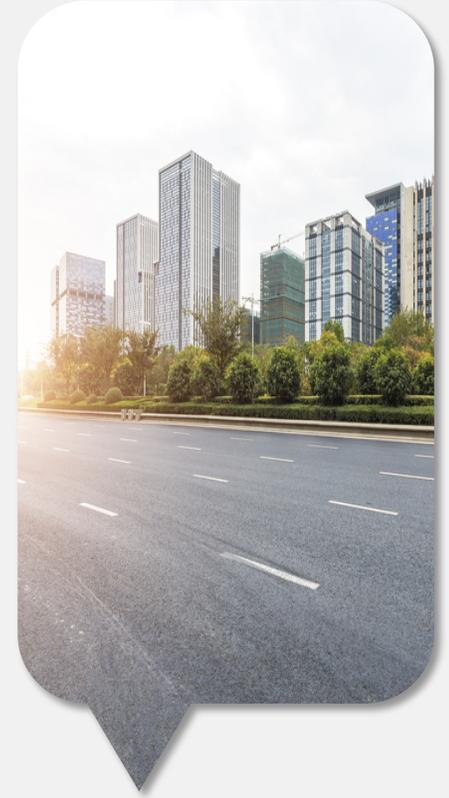


**Low benefit per budget  
NOK**



**Conflict between client and  
contractor**

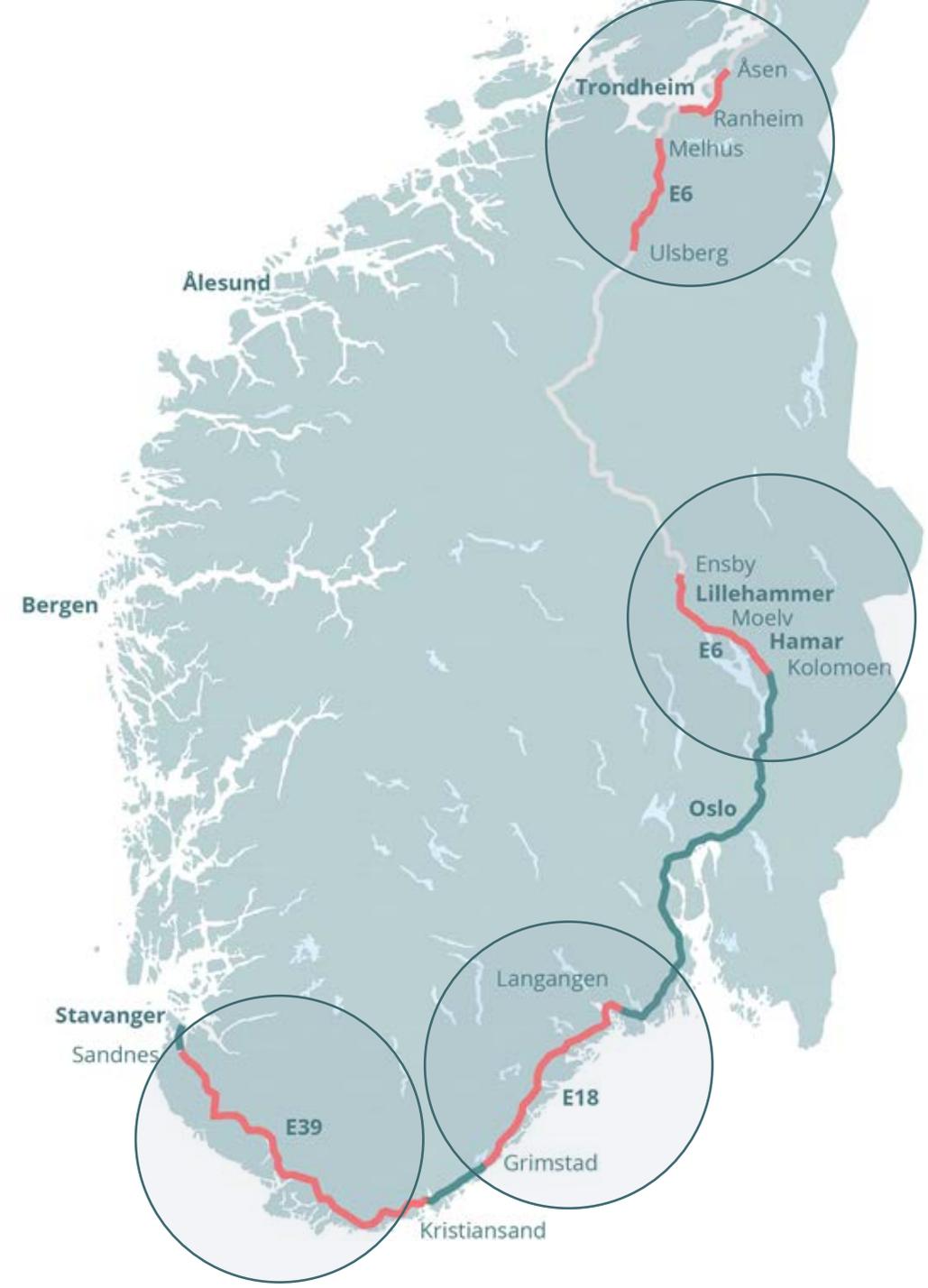
**Low degree of  
standardization**



**National road network  
through cities and urban  
areas**

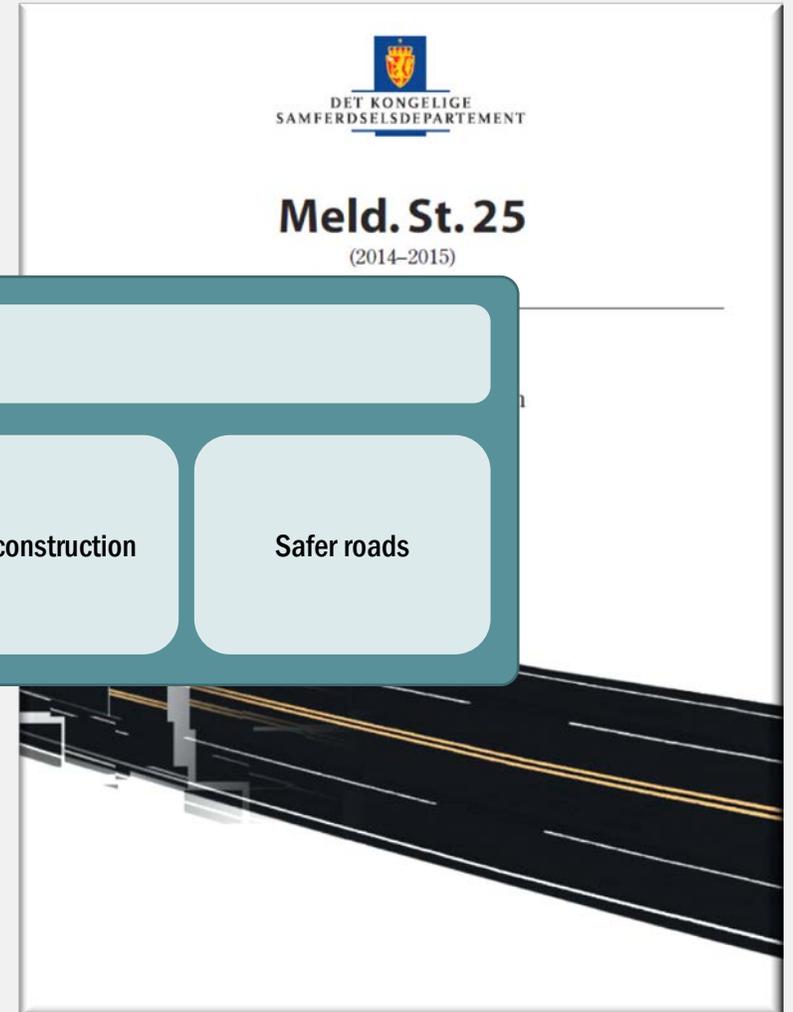
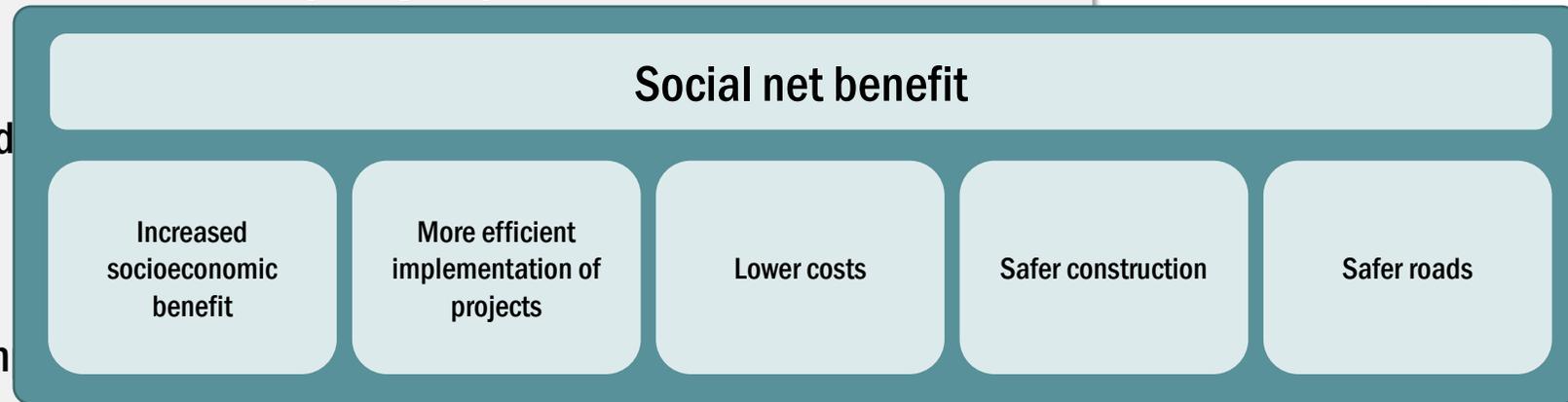
## ... Nye Veier is born

- 1<sup>st</sup> of January 2016
- 100 % state owned by The Ministry of Transport and Communications, with no commercial purposes
- Headquarters in Kristiansand
- Lean and efficient builders' organisation
- 165 employees
- The portfolio is geographically located in **4 regions** with local project offices and project organisations



# Our mission

- **White paper no. 25 (2014 – 2015)**
- **Plan, build, operate and maintain major highways**
- **Comprehensive and safe highways**
- **Strengthen the com**
- **More efficient, predictable and safer road transport**



# Stretches ranked based on social net benefit



Cost benefit analysis 2016 | 2019  
Net benefit per budget NOK spent



\*Highly indicative or lack of social net benefit estimate (Source: Nye Veier)

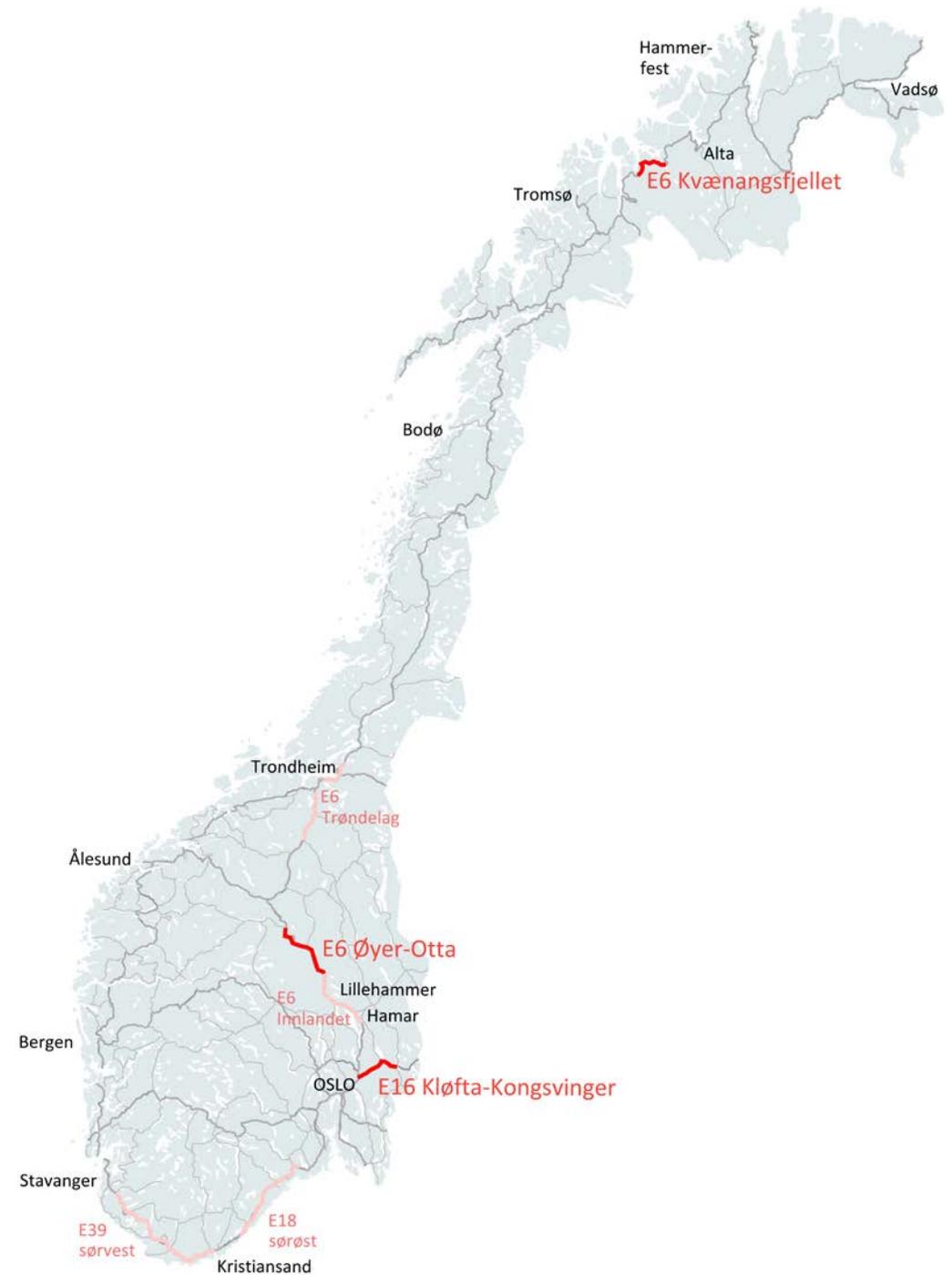
# New prioritisation



\*Highly indicative or lack of social net benefit estimate (Source: Nye Veier)

# Three new projects

- From **8 to 11 projects**
  - E6 Kvænangsfjellet
  - E6 Øyer – Otta
  - E16 Kløfta – Kongsvinger
- From **~500 km to 750 km**
- ... and signals from the government indicate it will **further increase!**



# Behaviour and culture



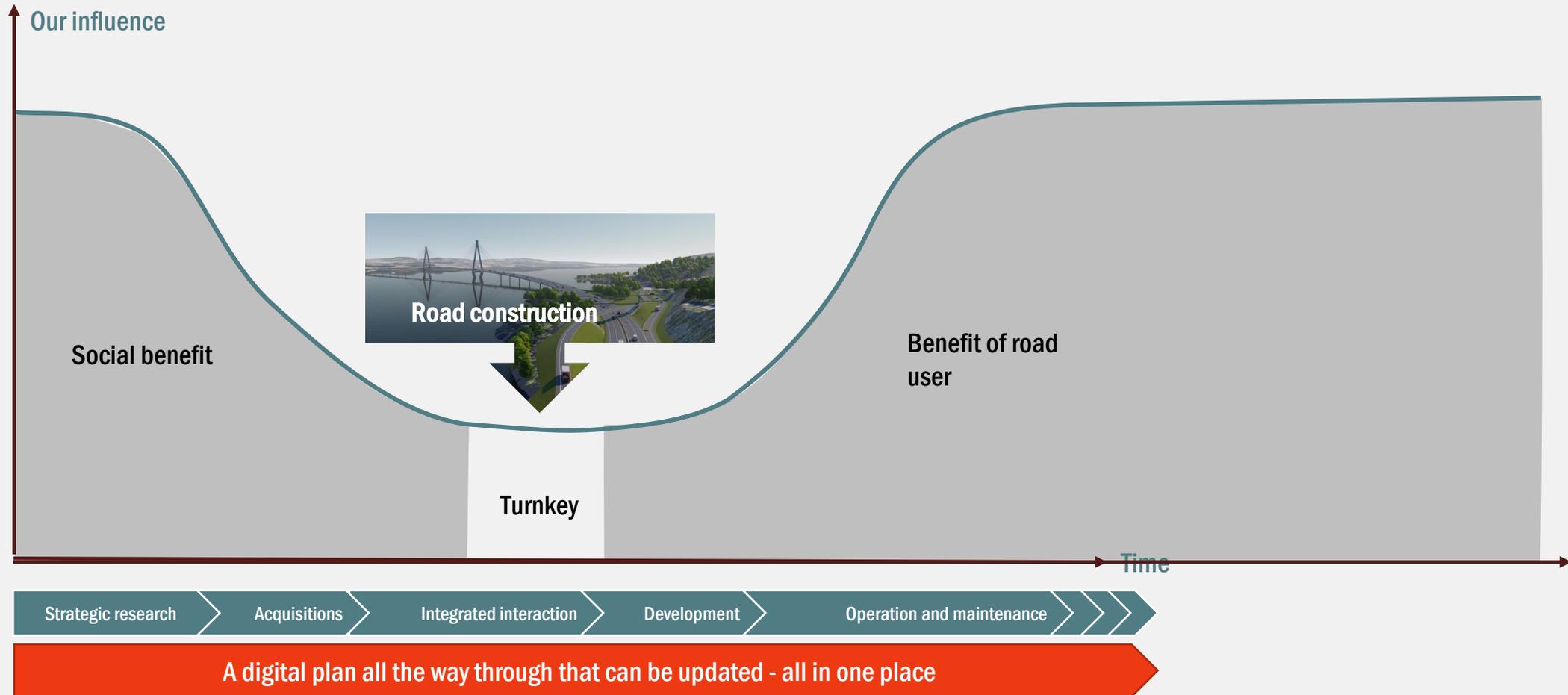
- **Matrix** organisational structure
- **Flat** organisation
- **Process-** and **goal** oriented
- **Most importantly:**

Our «**customers**» care about

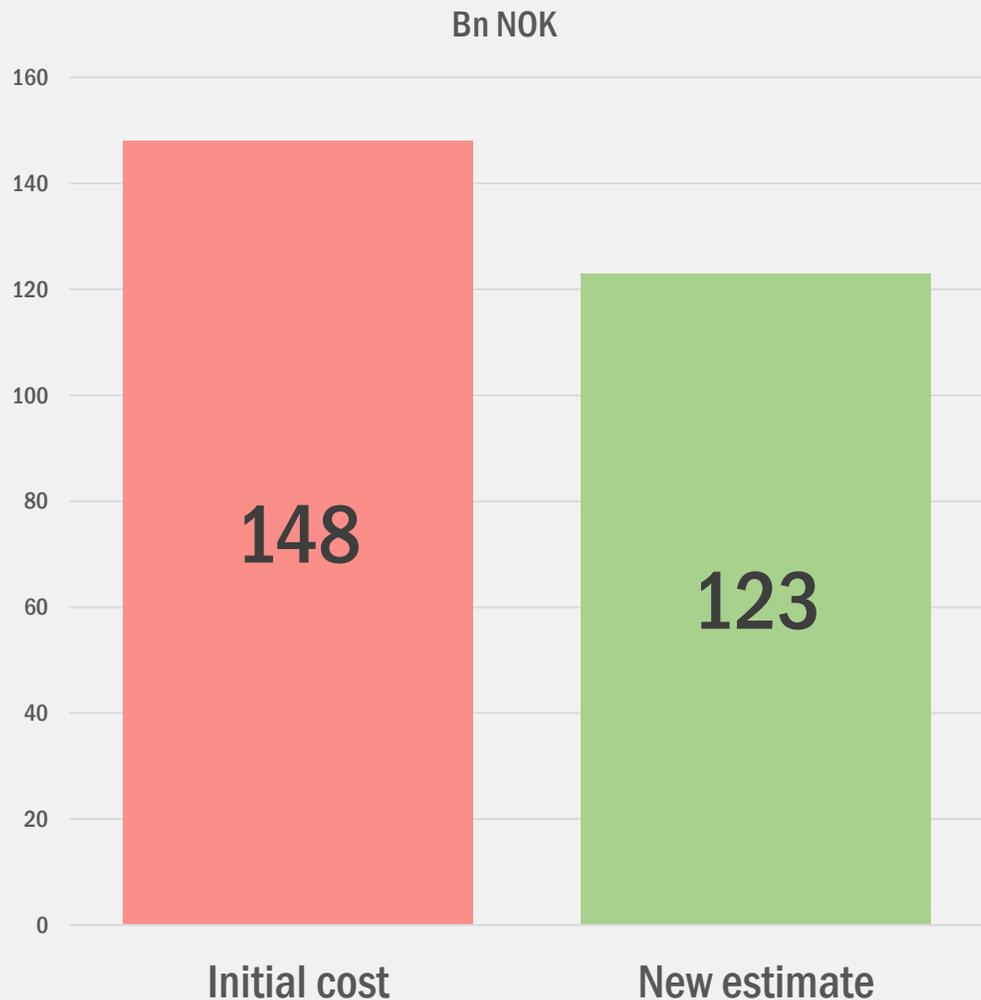
- **Traffic Safety**
- **Predictability**
- **Low tolls → Low costs**



# Our execution model



# Reduced costs

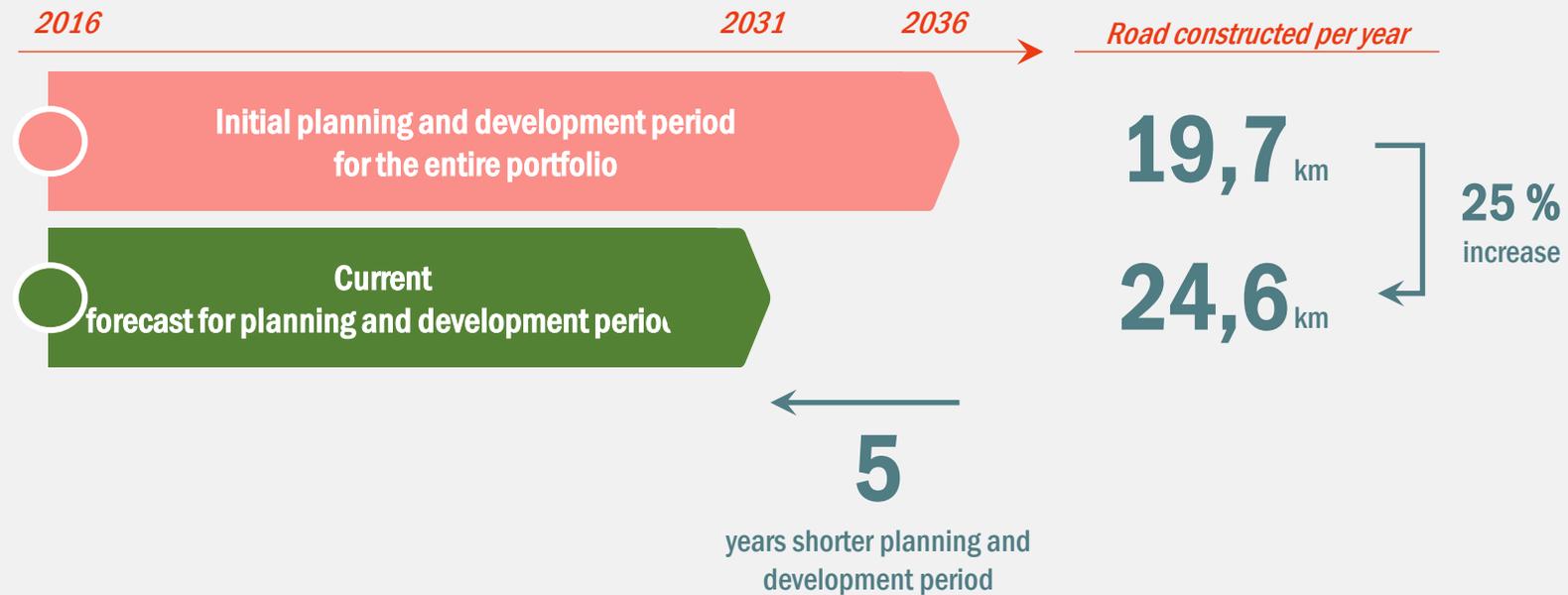


## Nye Veier sparer milliarder på veibygging – gir lavere bompenger

Selskapet Nye veier fikk 148 milliarder kroner for å bygge 530 kilometer motorvei mer effektivt. Nå viser deres egne beregninger at de kommer i mål 25 milliarder billigere enn ventet.

(Source: VG 25th of June 2019)

# Reduced time on implementation

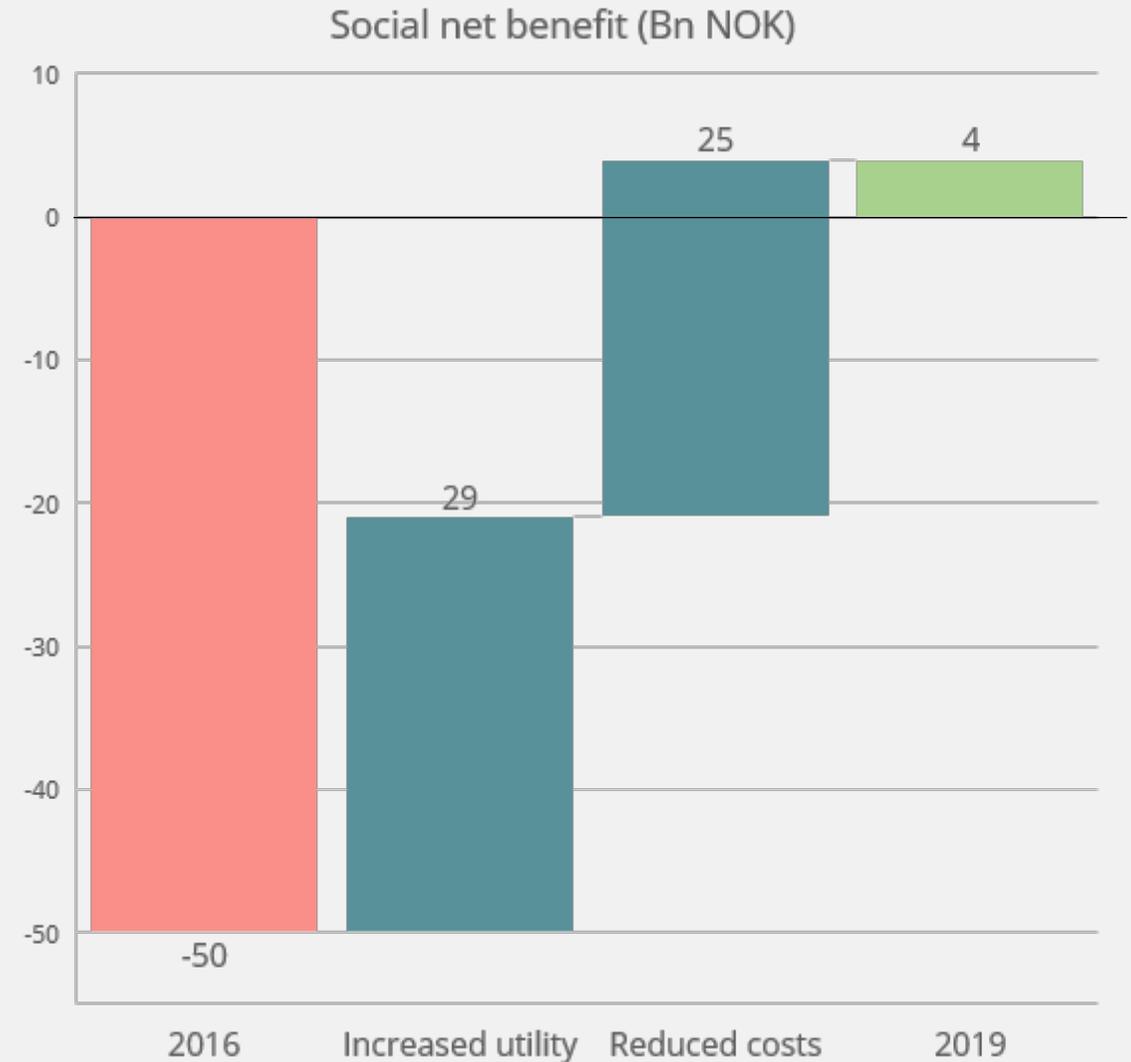


Nye Veier's current portfolio consists of 492 km of road  
The socio-economic benefit of a 5-year reduced planning and development period is not yet calculated

# Increase of social net benefit



- Since the company was founded, social net benefits are increased by **54 Bn NOK**
- Value increase of **118 MNOK** per km road
- This equals to **100 km** new four-lane highway
  - For example: Bergen – Voss! → For free!
- 6 out of 12 sections under construction
- Optimisation remains to be done on some routes

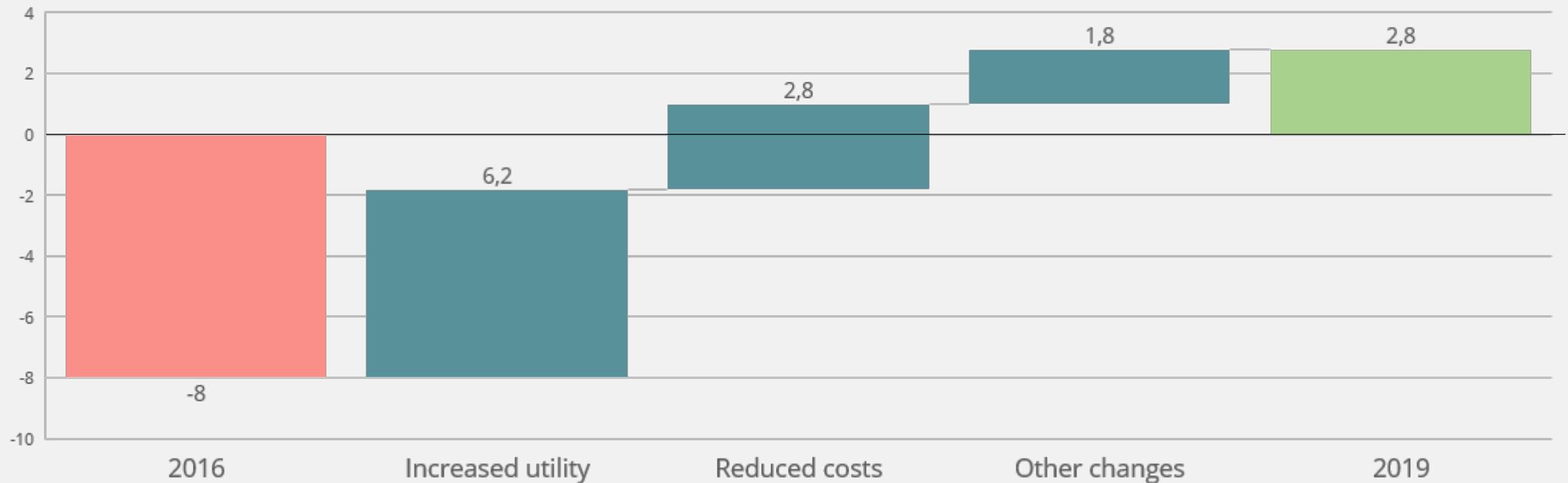


# E6 Ranheim – Åsen



- 42 km, four-lane, 110 km/h
- Reduced travel time by **14 min** and project cost down by **14 %**

Social net benefit (Bn NOK)



# E6 Ranheim – Åsen

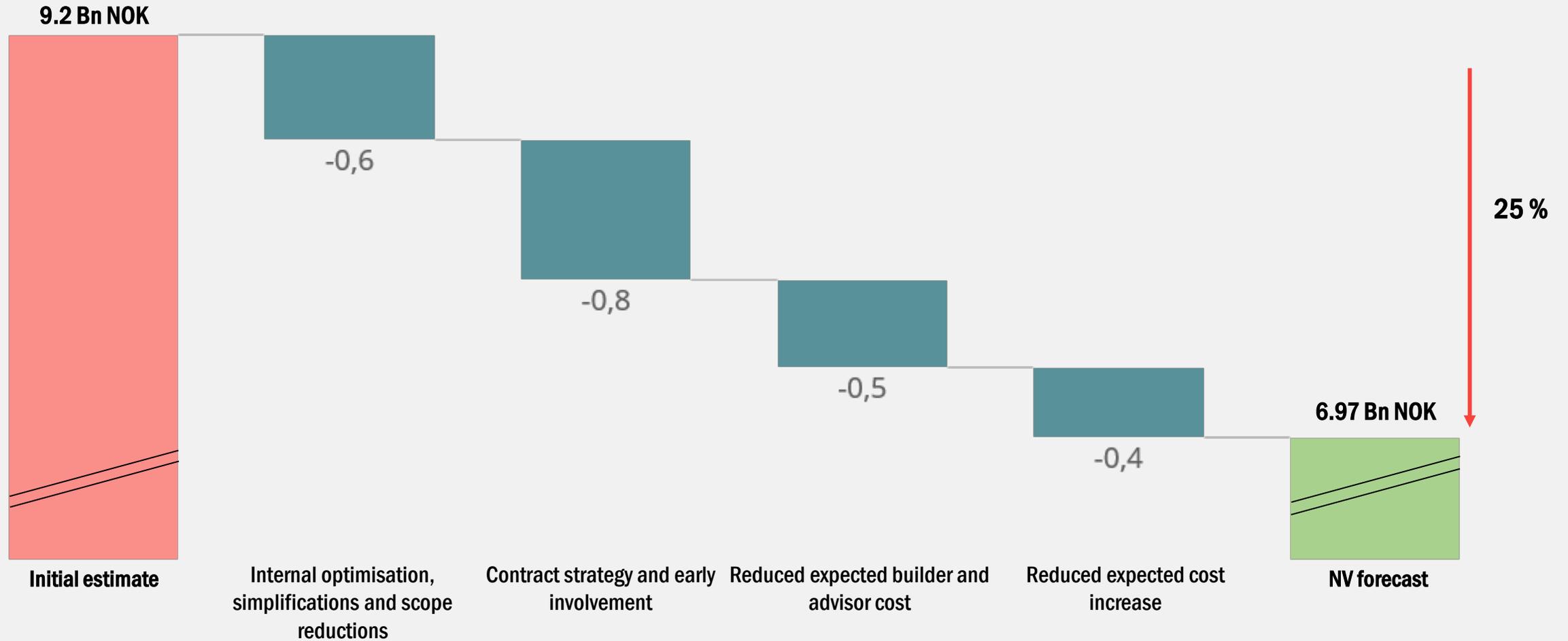


- How we have increased value
  - Path optimisation and crossing solutions at **Hommelvik** and **Åsen**
  - Possibility of road instead of new tunnel at **Hommelvik**
  - General intersection optimisations (game crossing among others)

# E6 Kolomoen – Moelv



Distribution of reduced costs (Bn NOK)



# Big hairy goals and Key Performance Indicators (KPIs)

- Increased utility
  - 29 Bn NOK
- Reduced CO2-emissions by 2030:
  - From construction: 40 %
  - From operating and maintenance: 50 %
- Road safety
  - 0 killed / 0 heavy injuries on our roads
- Cost reduction
  - 25 Bn NOK

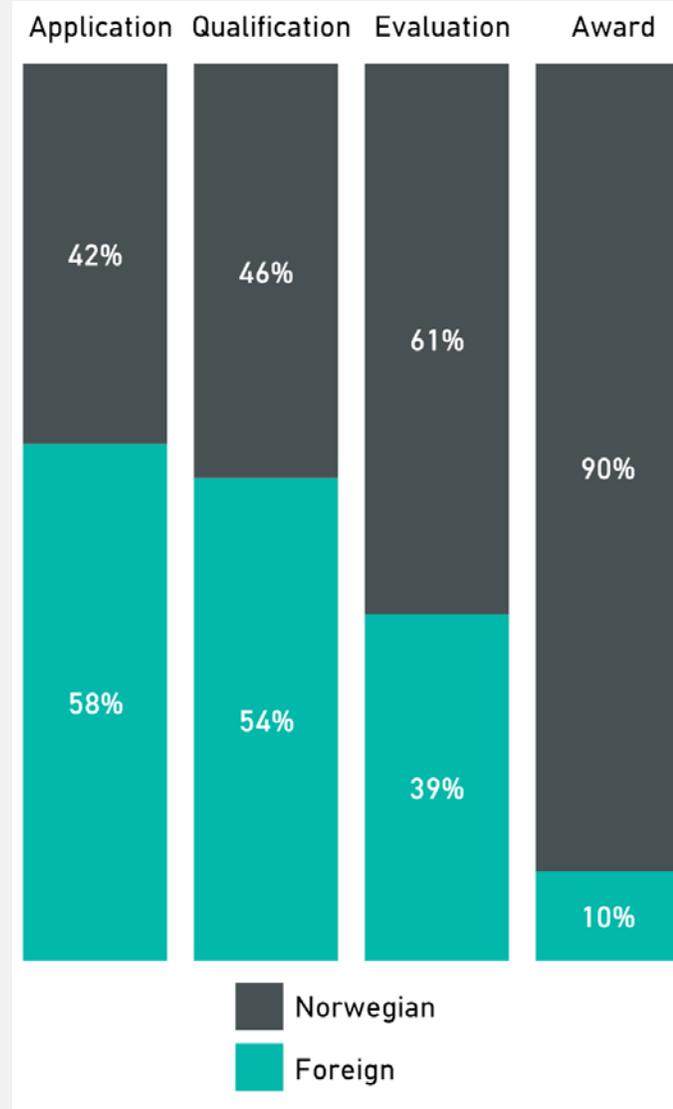
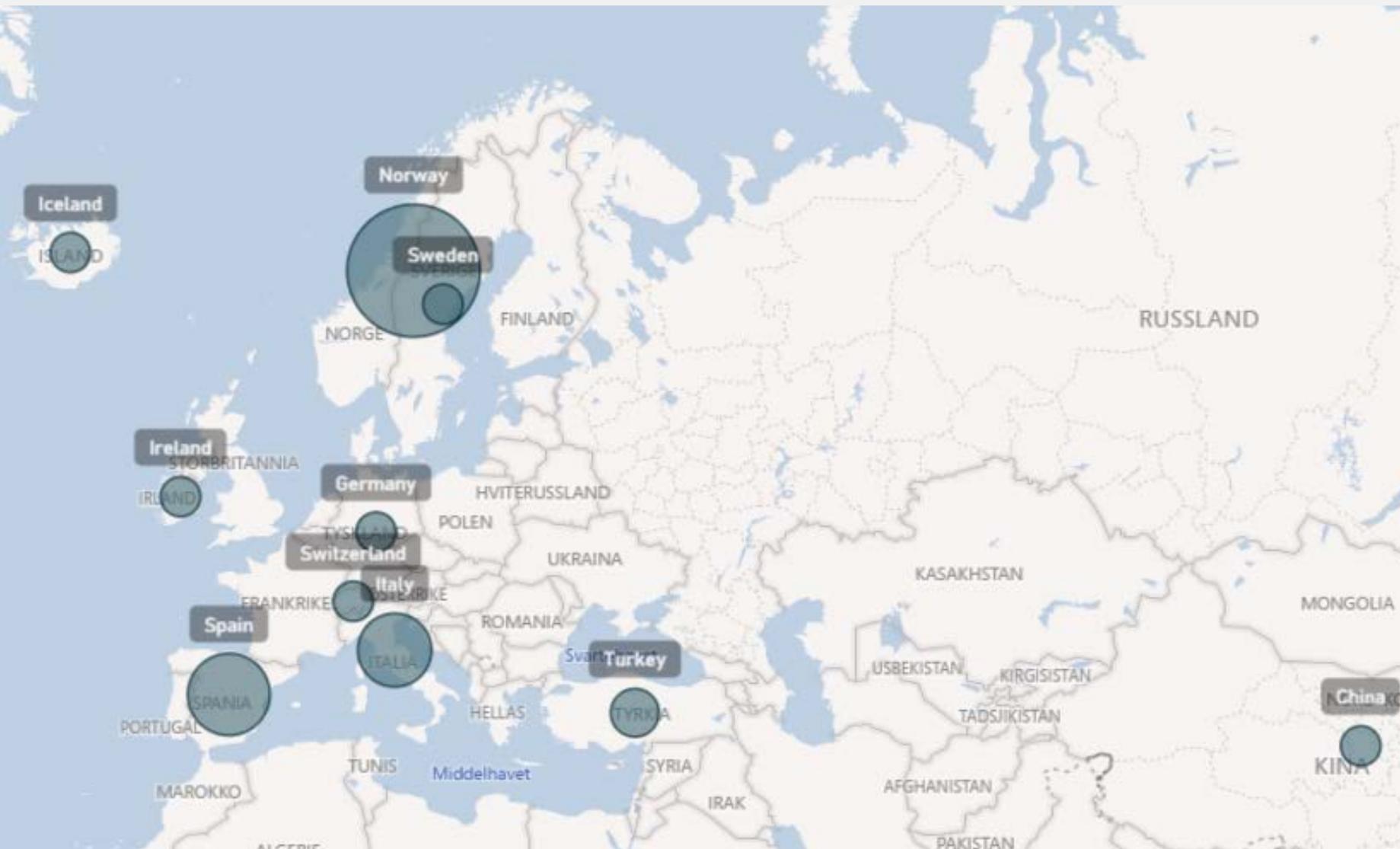




# 10 contracts signed within 3.5 years

Trinn 3	Acciona Con... 	AF Gruppen ... 	Hæhre Entre... 	Peab Anlegg ... 	Veidekke Ent... 		
Trinn 2	FCC Constru... 	Itinera SPA 	Kruse Smith ... 	NCC Norge AS 	Salini Impreg... 	Skanska Nor... 	
Trinn 1	China Comm... 	Hochtief Infr... 	Isolux Corsa... 	Obrascon Hu... 	Roadbridge ... 	Aibel AS 	
Trinn 0	Astaldi SPA 	Corsan-Corv... 	Dogus Insaat... 	Gulermak AS 	Johs J Sylter... 	Nomeland A... 	Pini Swiss E... 
	Risa AS 	Rizzani de Ec... 	Sacyr Constr... 	Leonhard Nil... 	Strabag AG 		

# ... and how do Norwegian companies compete?



# Our contracts have changed over time

- Increased priority on **what** to solve, not **how**
- Introduced **20 year warranty** and maintenance to secure Life Cycle Cost (LCC)
- **Tightened some requirements** – including HSE and CSR
- **Earlier involvement** of turnkey
- **Requirements to Socially Responsible Public Procurement**

BYGGENÆRINGENS  
LANDSFORENING



Fellesforbundet



# Value Engineering



8. Evaluation and revision



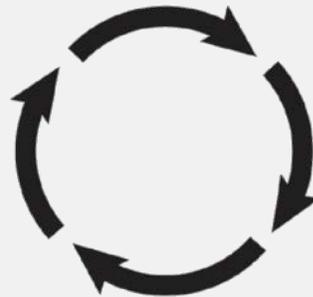
1. Choice of project and team



2. Exploration phase



7. Completion



3. Idea phase



6. Presentation – best idea



5. Development phase



4. Assessment stage



# 54

Bn NOK increased  
social net benefit

# 9

Bn NOK in ongoing  
competitive biddings

# 20

% cost savings

# 21

Bn NOK in ongoing contracts



**N** NyeVeier

åpner 52 kilometer  
firefelts motorvei i 2019

Bedre transitt i hus  
nye veier, per, skal være  
og skal løse.

LÆRING OM  
NYE VEIER

Få noen  
~~AVA~~  
AHA-oplevelser

FELLESSKAP

Bli kjent med  
HVERANDRE.

TAKT

TUR

Bli kjent på  
TVERS AV LOKASJON  
OG ROLLER

ENT

ENT

Thank you!

*Ingrid Dahl Hovland, CEO Nye Veier*



Vi bygger  
**gode** veier  
**raskt** og  
**smart**



forny  
forbedrer  
forsikrer

