



Motorway Construction Remake Model

Ingrid Dahl Hovland, CEO Nye Veier

From small patches to long stretches

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**

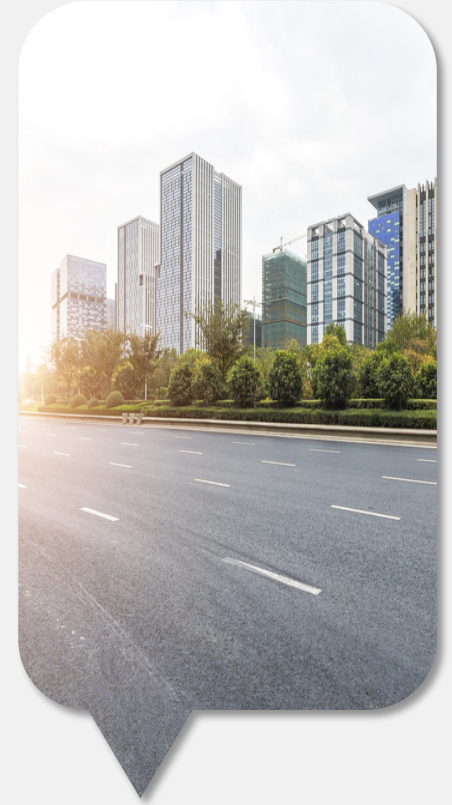


**Low benefit per budget
NOK**



**Conflict between client and
contractor**

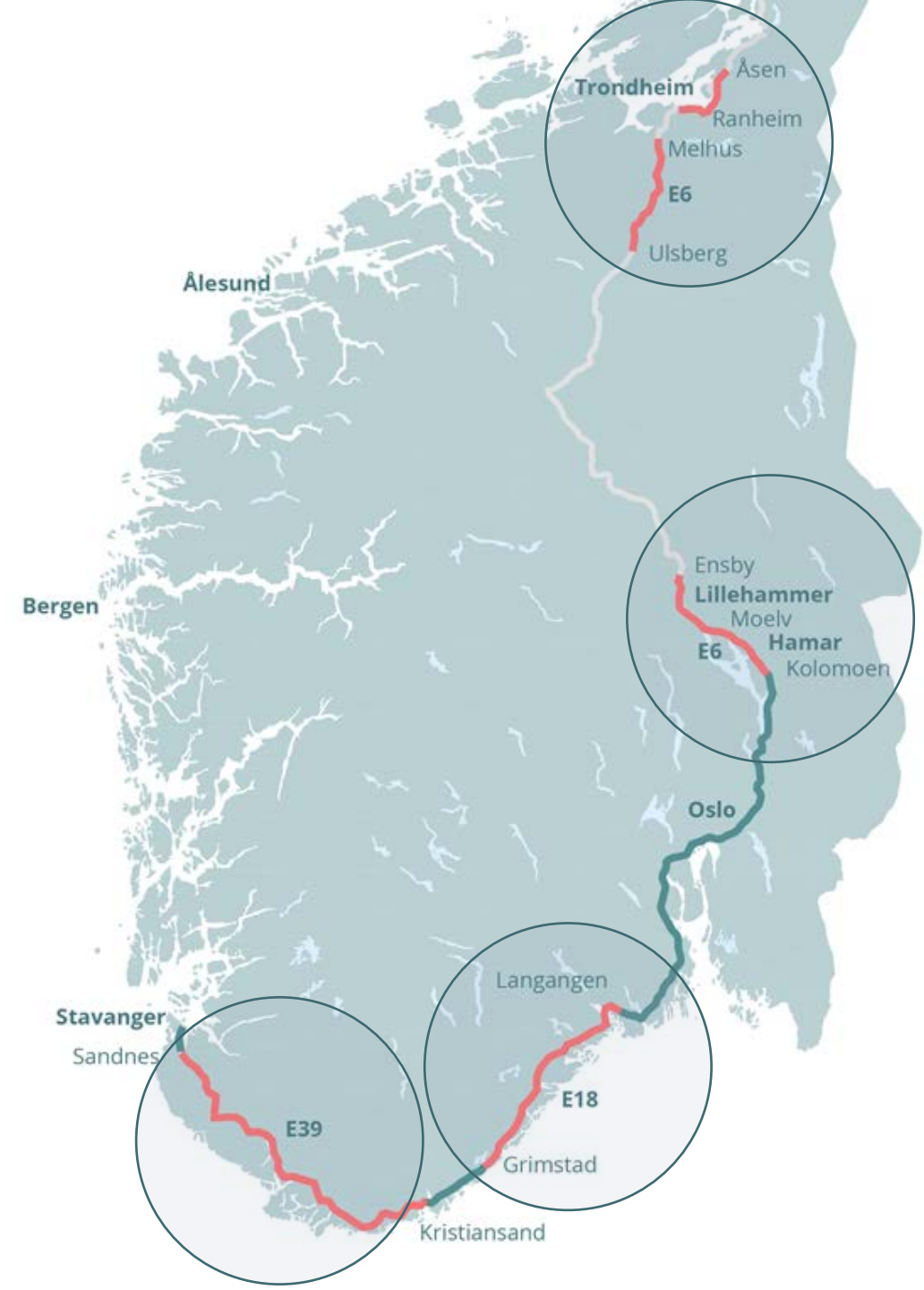
**Low degree of
standardization**



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

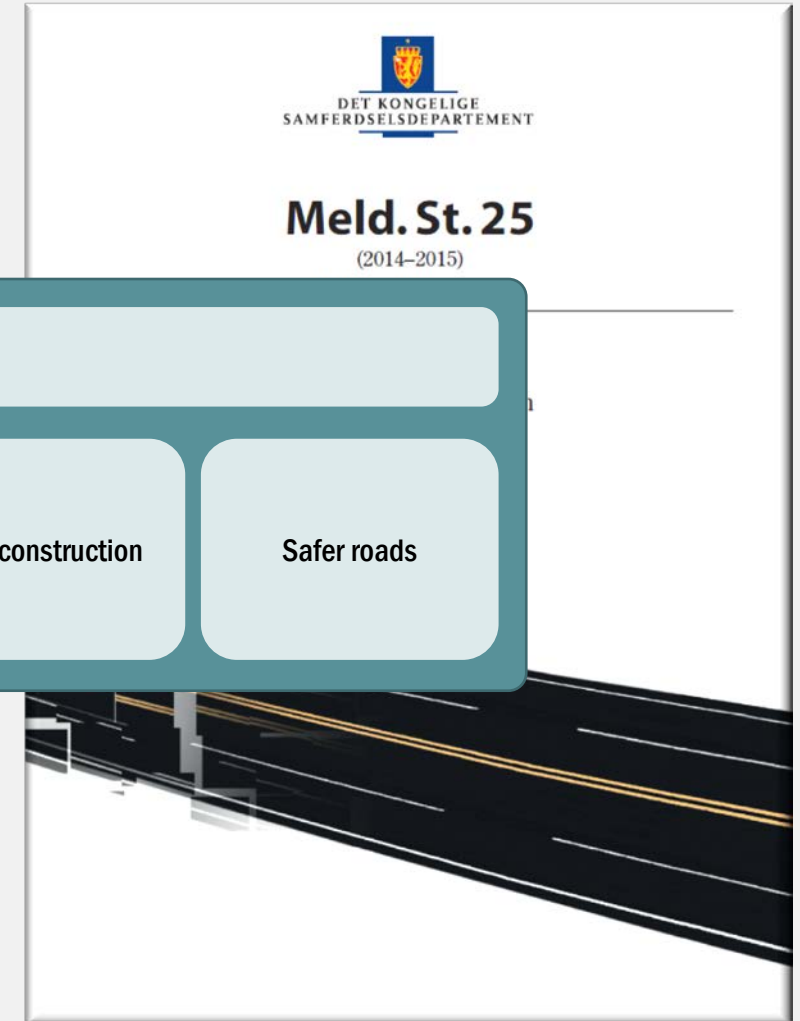
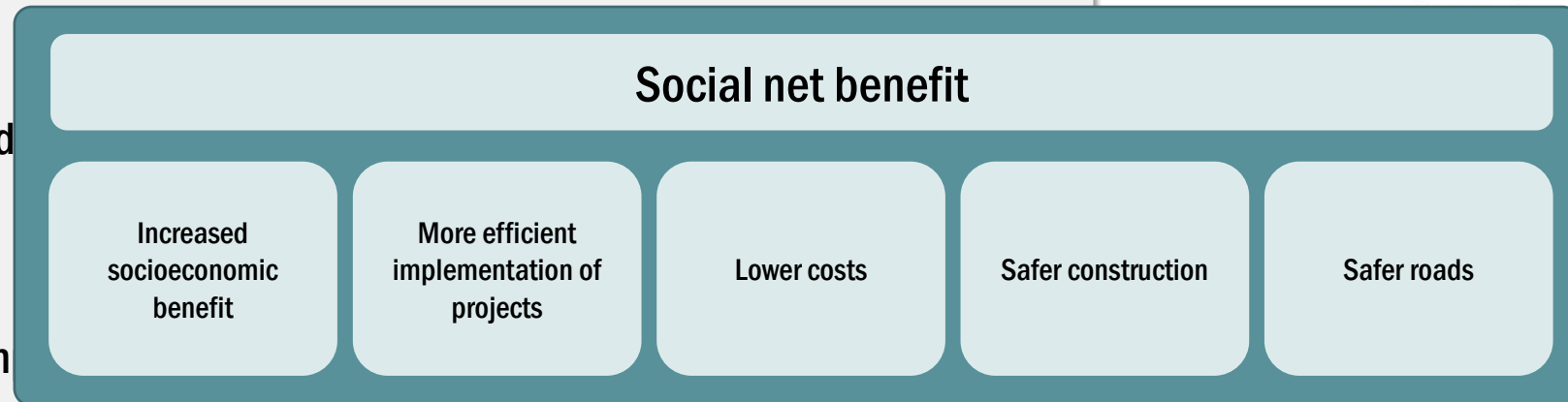
... Nye Veier is born

- 1st 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



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

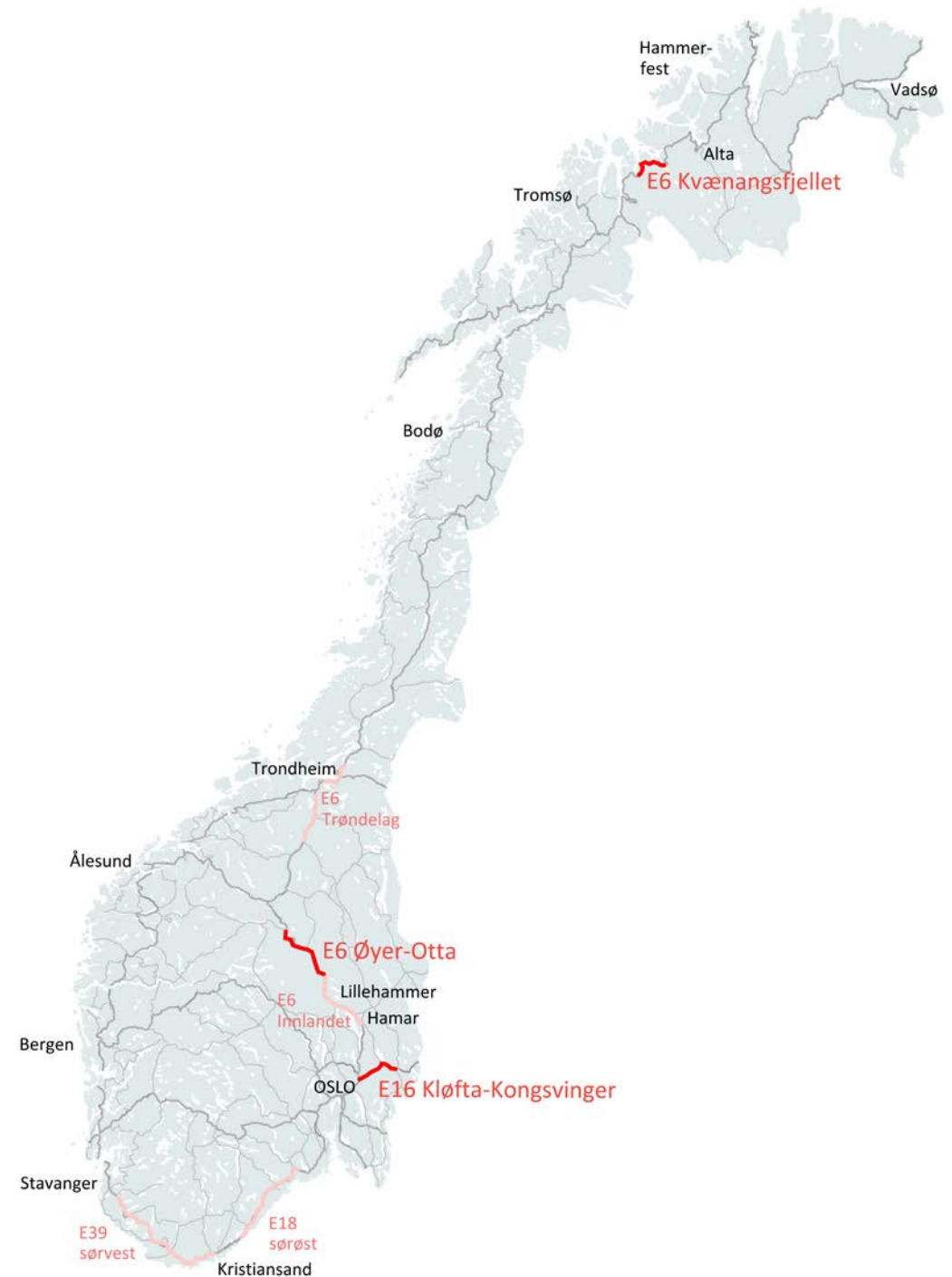
New prioritisation



*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!**



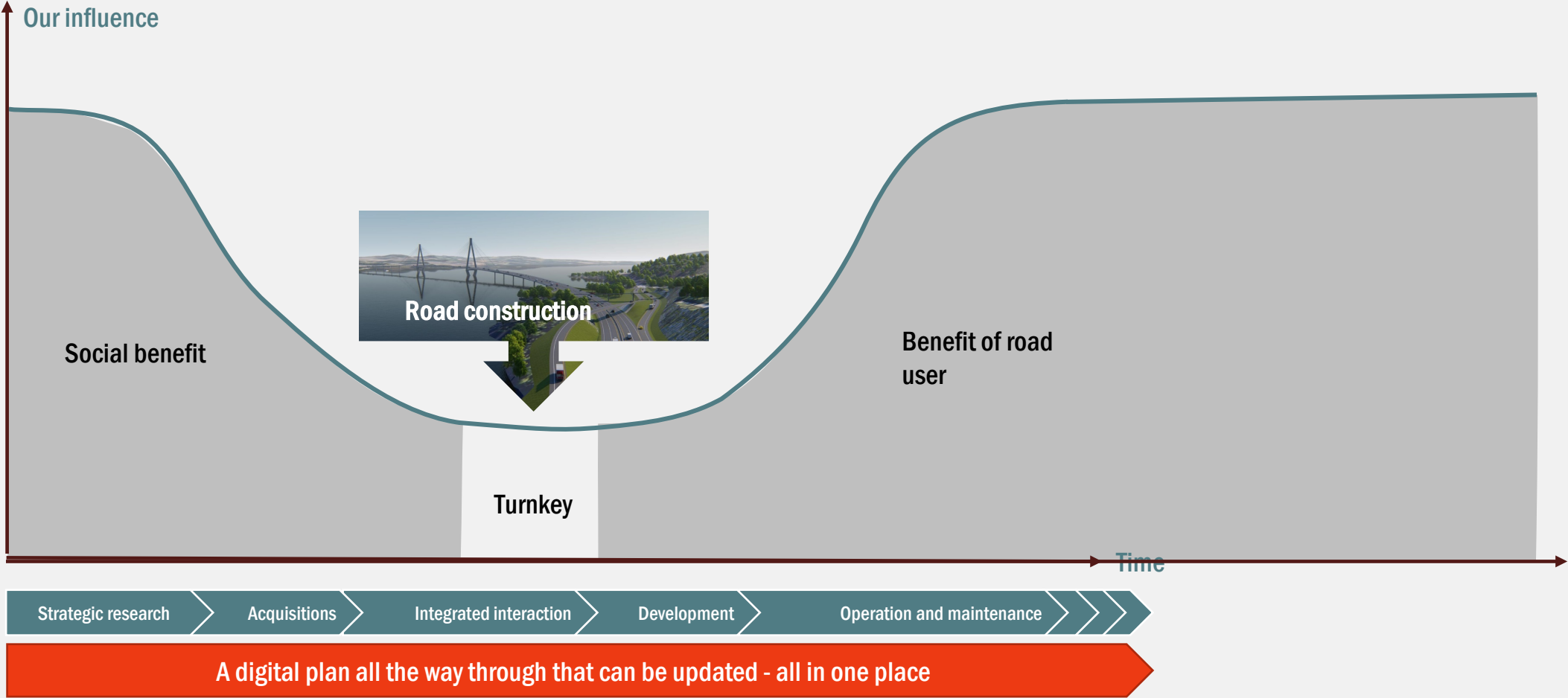
Behaviour and culture



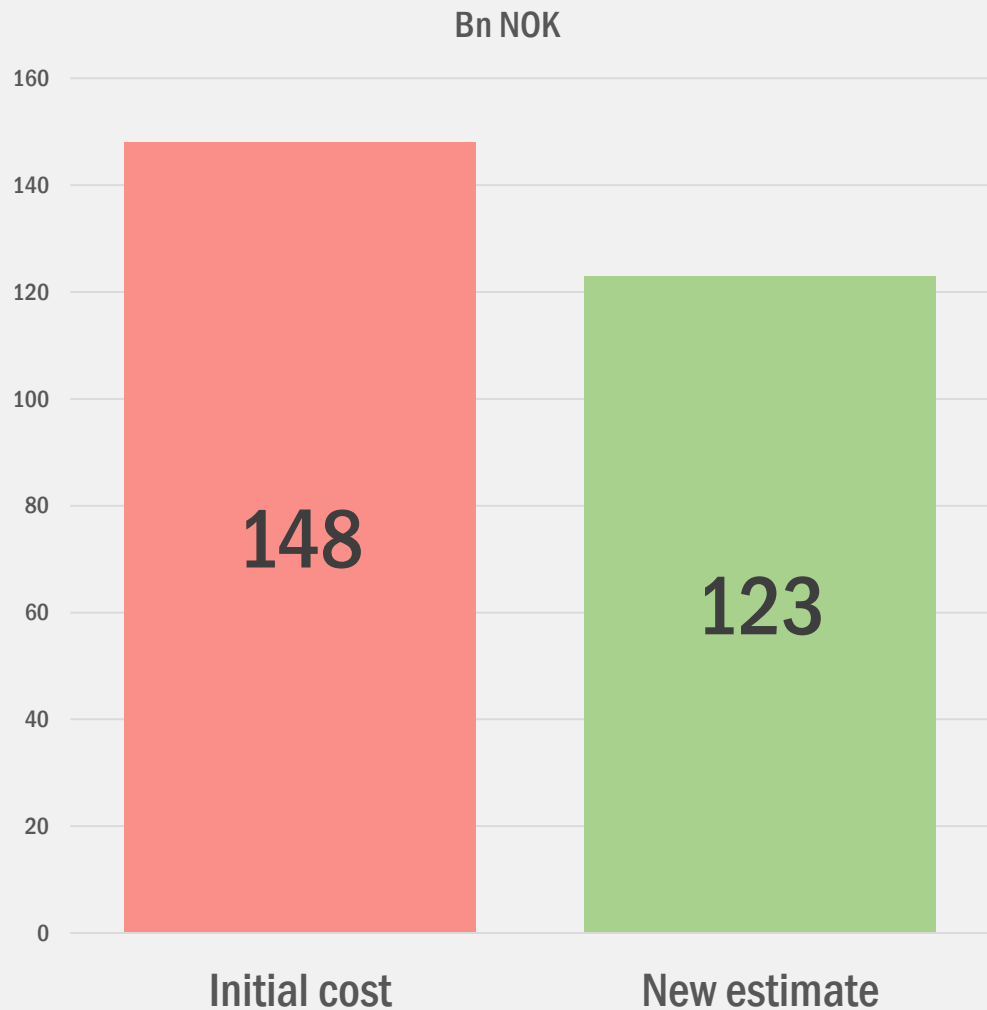
- **Matrix** organisational structure
- **Flat** organisation
- **Process-** and **goal** oriented
- Most importantly:
Our «**customers**» care about
 - Traffic Safety
 - Predictability
 - Low tolls → Low costs



Our execution model



Reduced costs

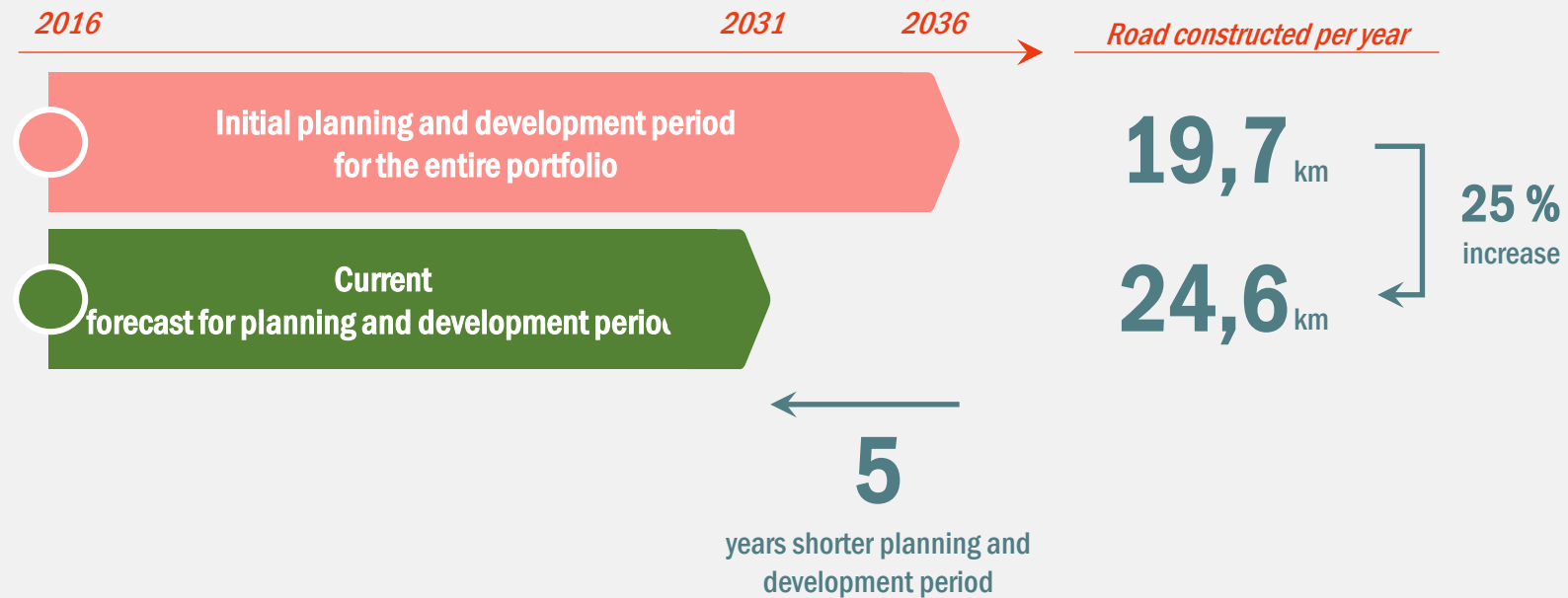


Nye Veier sparer milliarder på veibygging – gir lavere bompenger

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

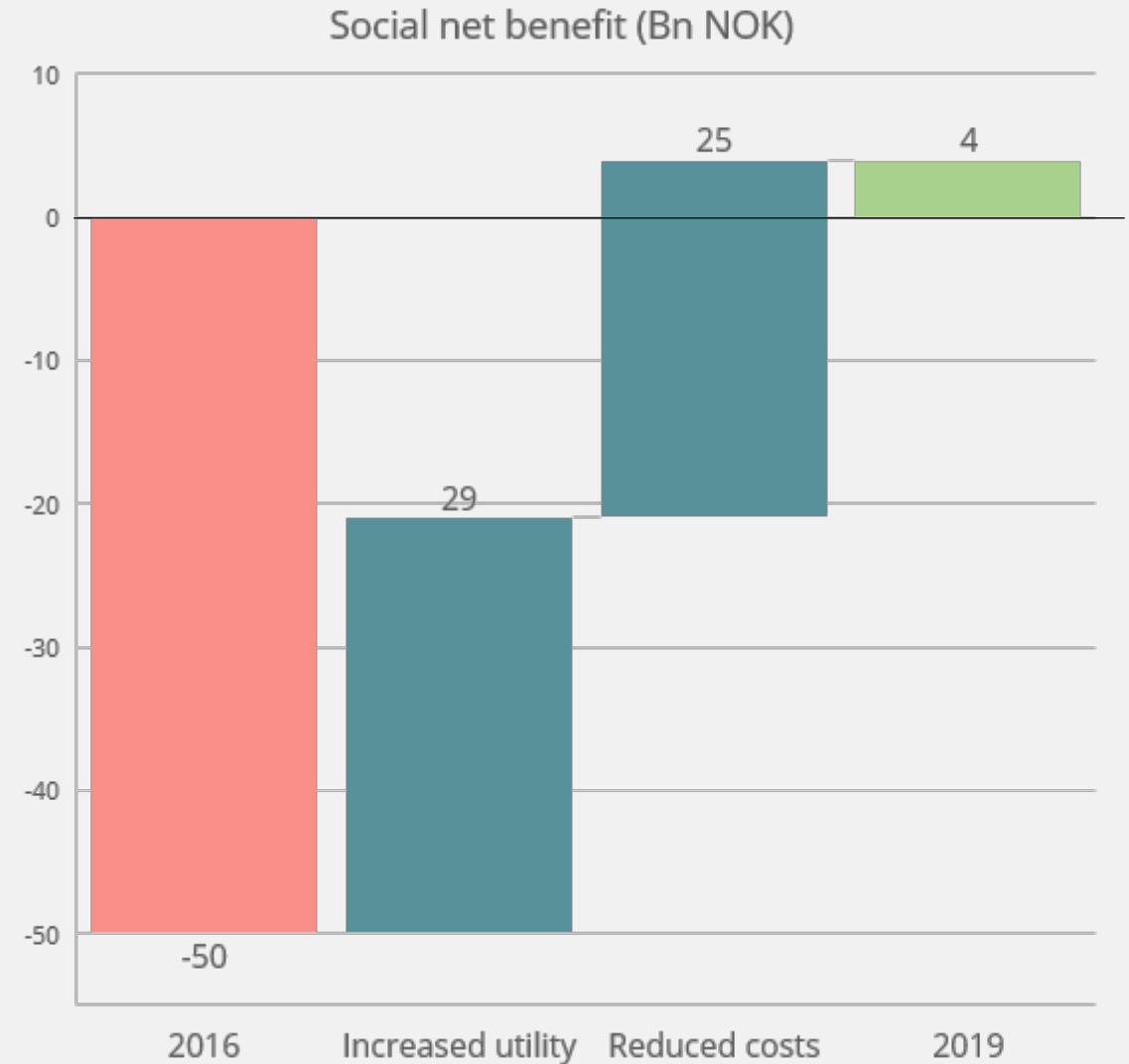


Nye Veier's current portfolio consists of 492 km of road
The socio-economic benefit of a 5-year reduced planning and development period is not yet calculated

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

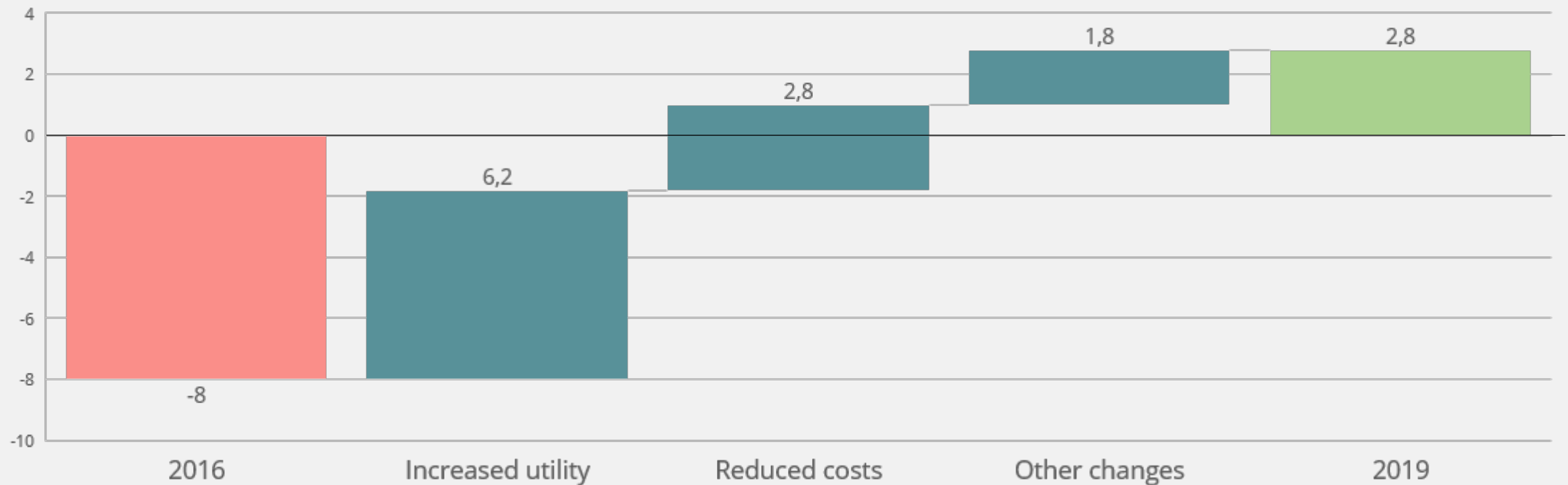


E6 Ranheim – Åsen



- 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

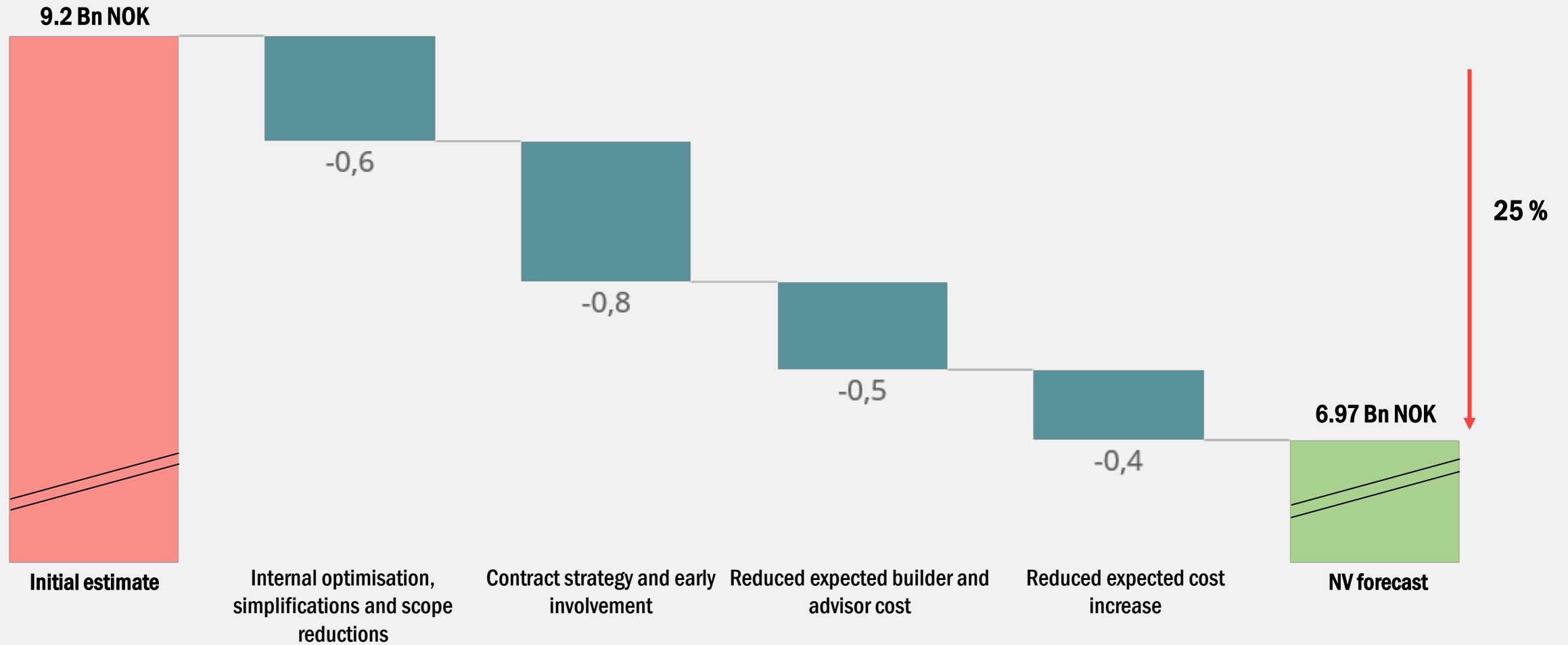


- How we have increased value
 - Path optimisation and crossing solutions at **Hommelvik** and **Åsen**
 - Possibility of road instead of new tunnel at **Hommelvik**
 - General intersection optimisations (game crossing among others)

E6 Kolomoen – Moelv



Distribution of reduced costs (Bn NOK)








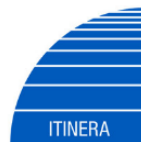



















Big hairy goals and Key Performance Indicators (KPIs)

- 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

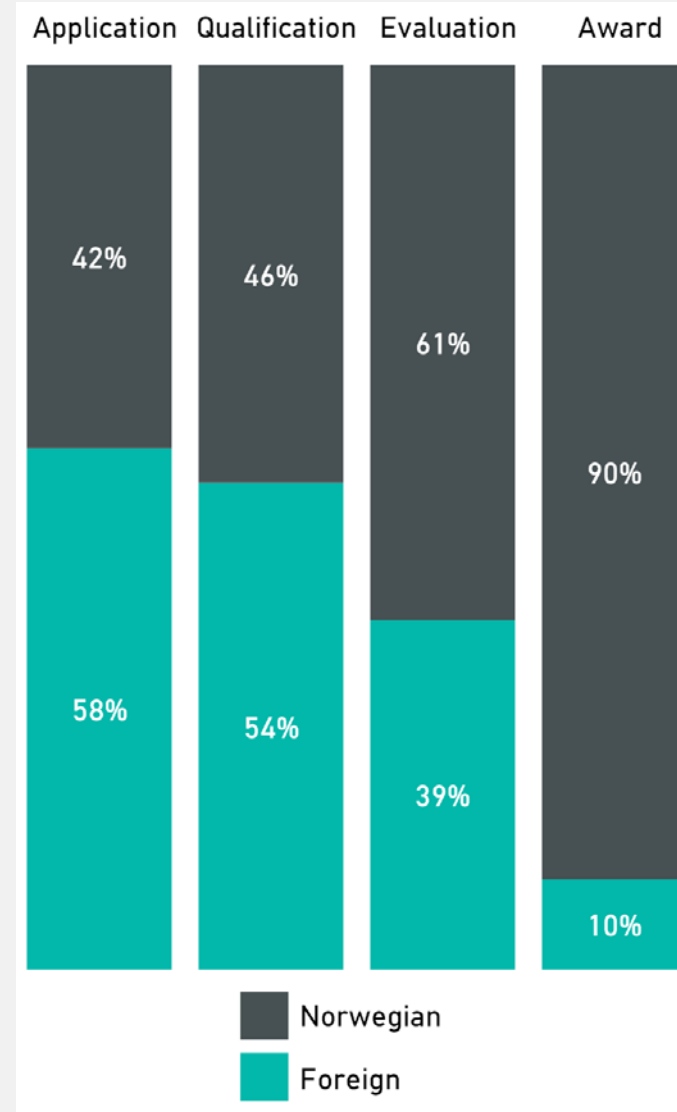
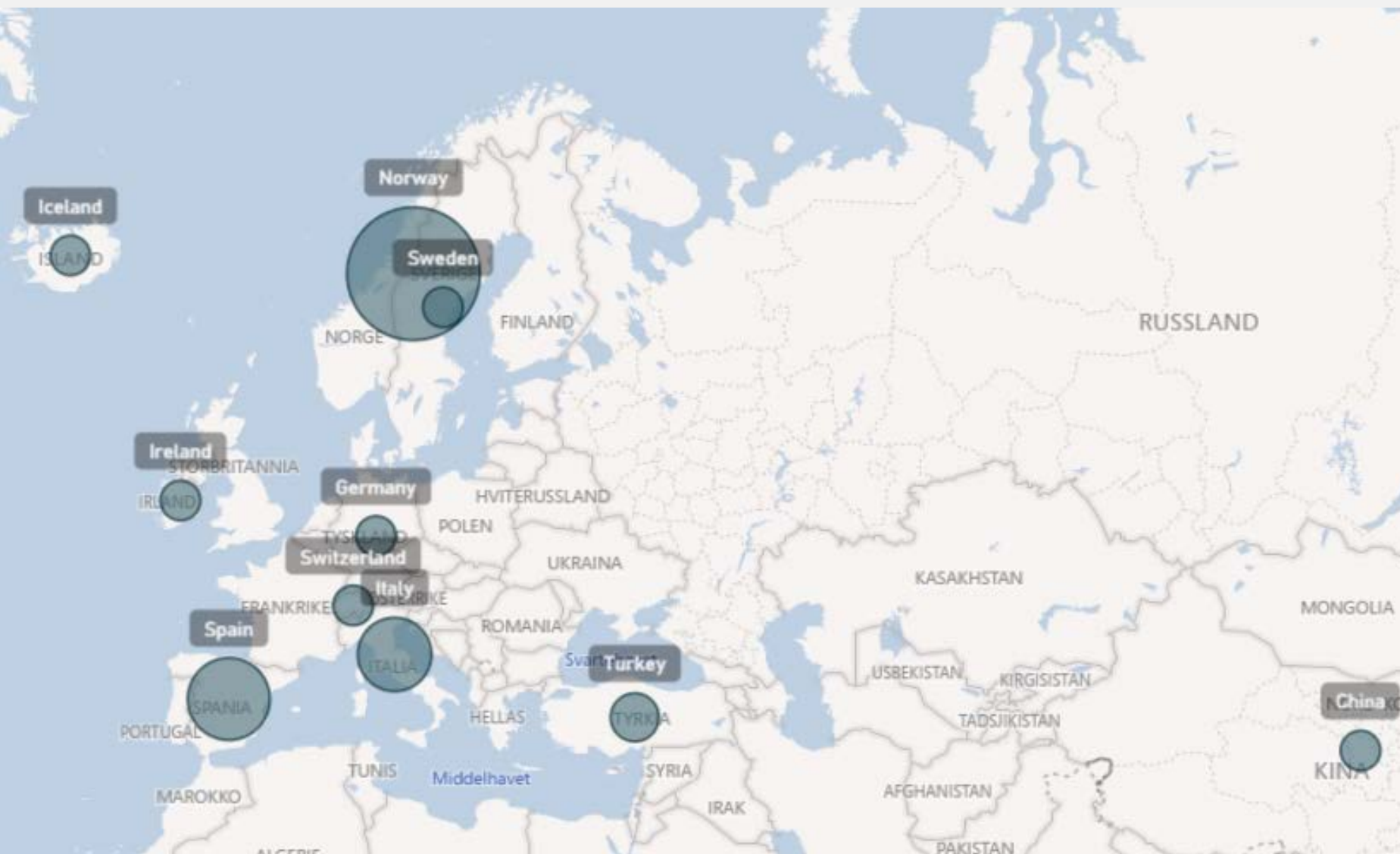




10 contracts signed within 3.5 years

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

... 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



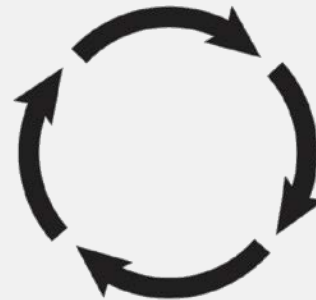
1. Choice of project and team



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 forståelse i hva
nye veier er, 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

