



**Baltic Biogas Bus**

# Baltic Biogas Bus Project 2009-2012



Local partner

A project to stimulate the use of biogas as fuel for city buses, aiming to reduce environmental impact.



# Background

## Climate change strategy

- Extended use of biogas for city buses will lower emissions, improve inner city air quality and strengthen the role of public transport in an efficient strategy to limit the impact from traffic on climate change.



# Introducing Gas Buses in Bergen: Strategies for participation in decision making processes

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## Agenda

- About HOG Energi
- A succesful natural gas story
- Case: decision to use biogas in Bergen buses
- The way we work «framework»
- Philosophy of work
- Conclusion

## About HOG Energi

- Interest organization that seeks to improve terms and conditions for developing and growing business across all energy sectors in the Hordaland region
- HOG Energi have achieved significant results with many important issues for the region such as:
  - Development of infrastructure for natural gas
  - Increased use of natural gas in public transport
  - Gas buses in Bergen
  - Gas ferries
  - Natural gas in vessels
  - LNG facility at Kollsnes
  - Pipeline from Kollsnes to Mongstad raffineri

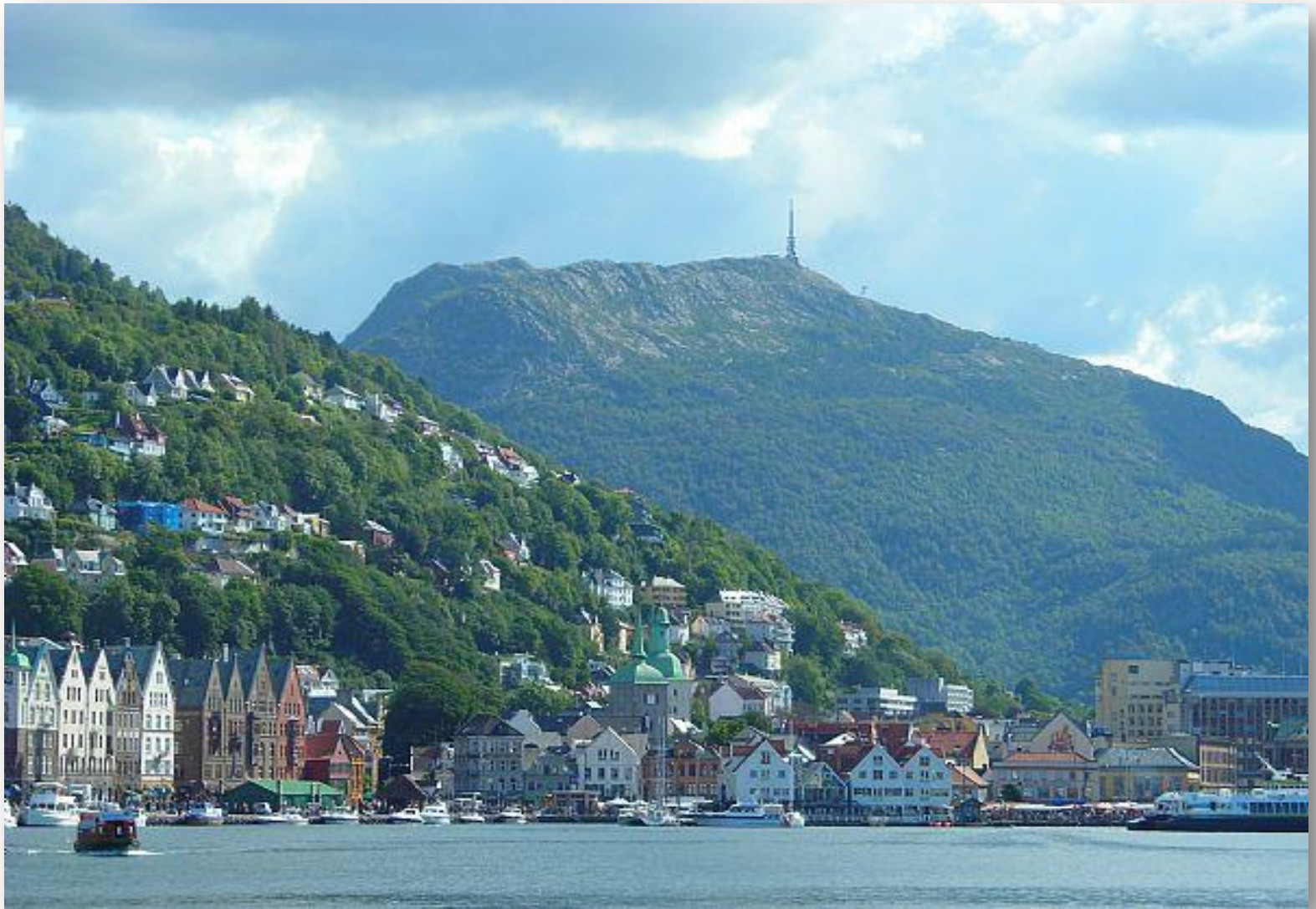


# A successful natural gas story!





# Bergen





## Natural gas buses in Bergen



## Stord



- 25 km pipeline
- 105 m<sup>3</sup> LNG facility supplying energy to companies like Aker Solutions
- CNG Station
- Biogas production



# The world's first supply vessel on natural gas



- **Initiative from HOG Energi to promote use of LNG on vessels in 1996**
- **Process involved industry (shipyards and ship owners), R&D and government**
- **Eidesvik Offshore invested in two LNG vessels as an outcome of the process and later on fuel cell powered vessel Viking Lady**
- **Government programs provided soft financing**
- **Viking Lady runs these days on fuel cell and LNG**







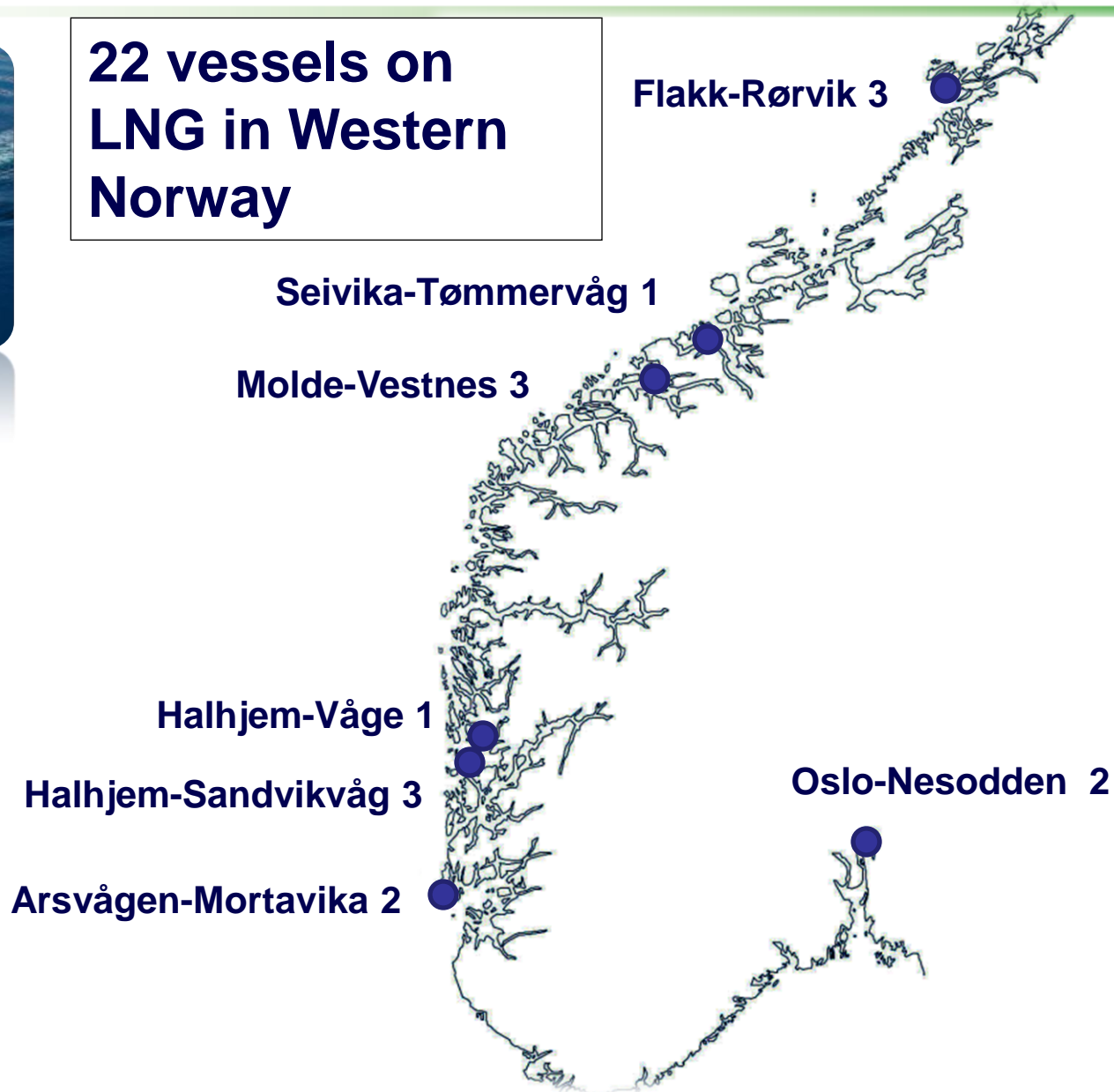
● **Coast Guard 3**



● **Ferries**



## 22 vessels on LNG in Western Norway



## Kollsnes

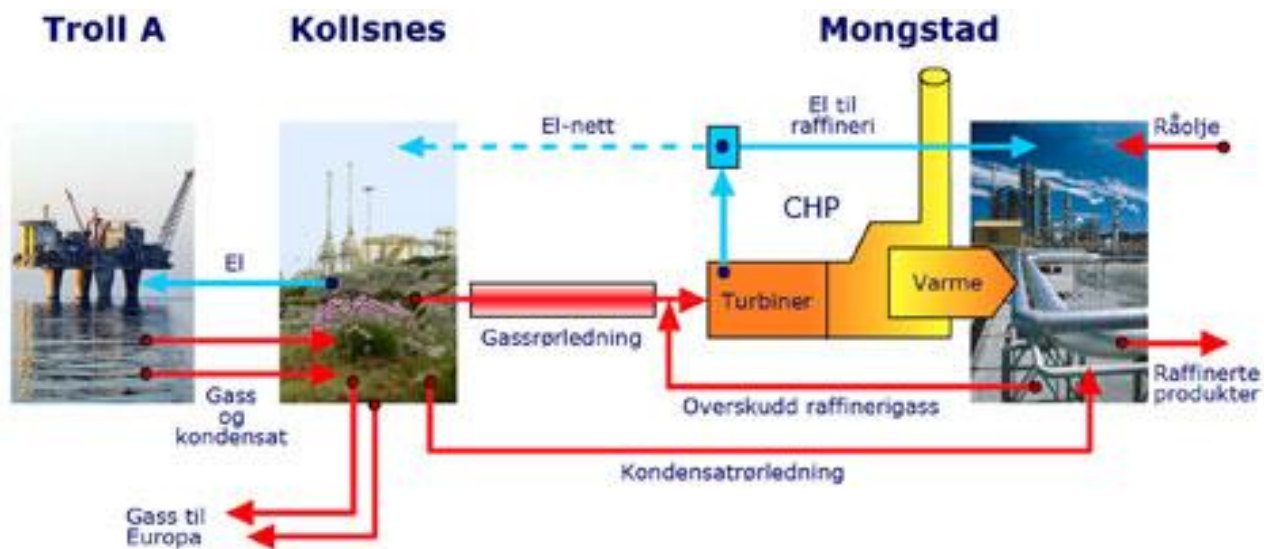
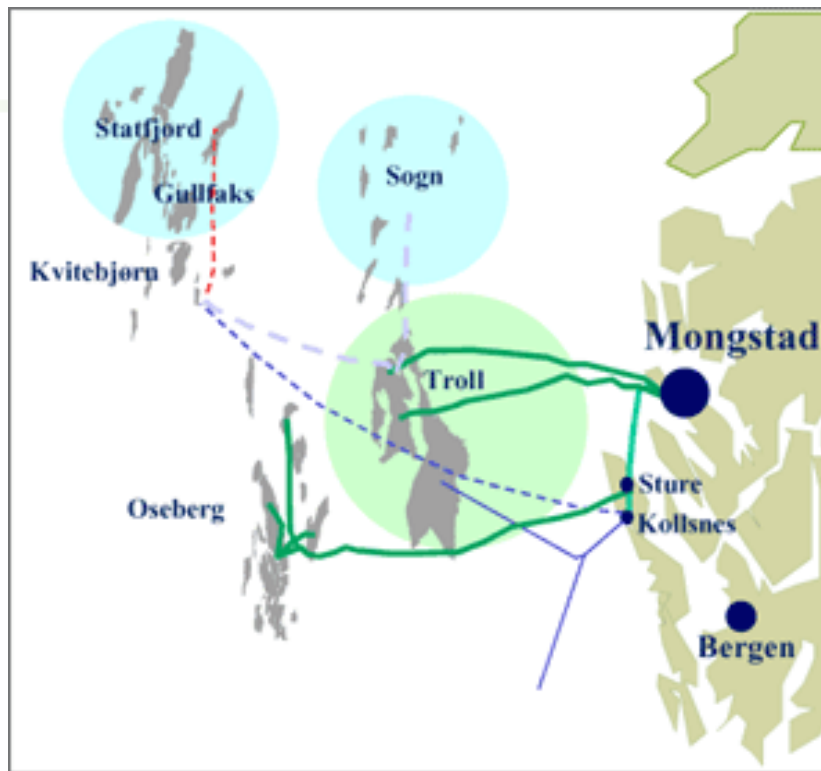


- Establishment of Naturgassparken Vest
- One of Norway's largest LNG production plant

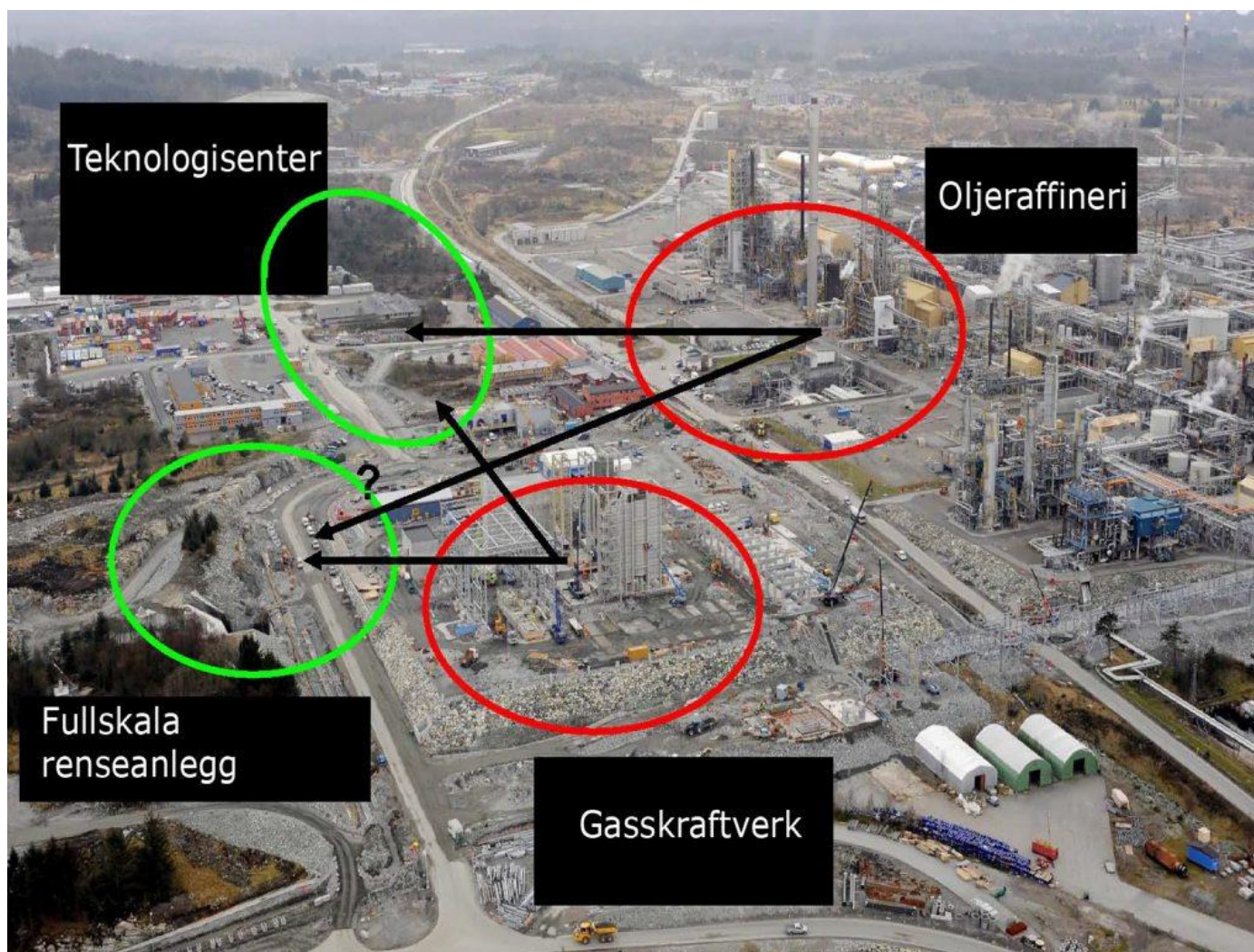
## Mongstad



- 2006 – 2010 Mongstad Thermal power plant
- 2007 Gas pipeline Kollsnes to Mongstad
- 2008 – 2013 CO2 catch facilities under construction







# The next chapter...

# Biogas

# Case: decision to use biogas in Bergen buses

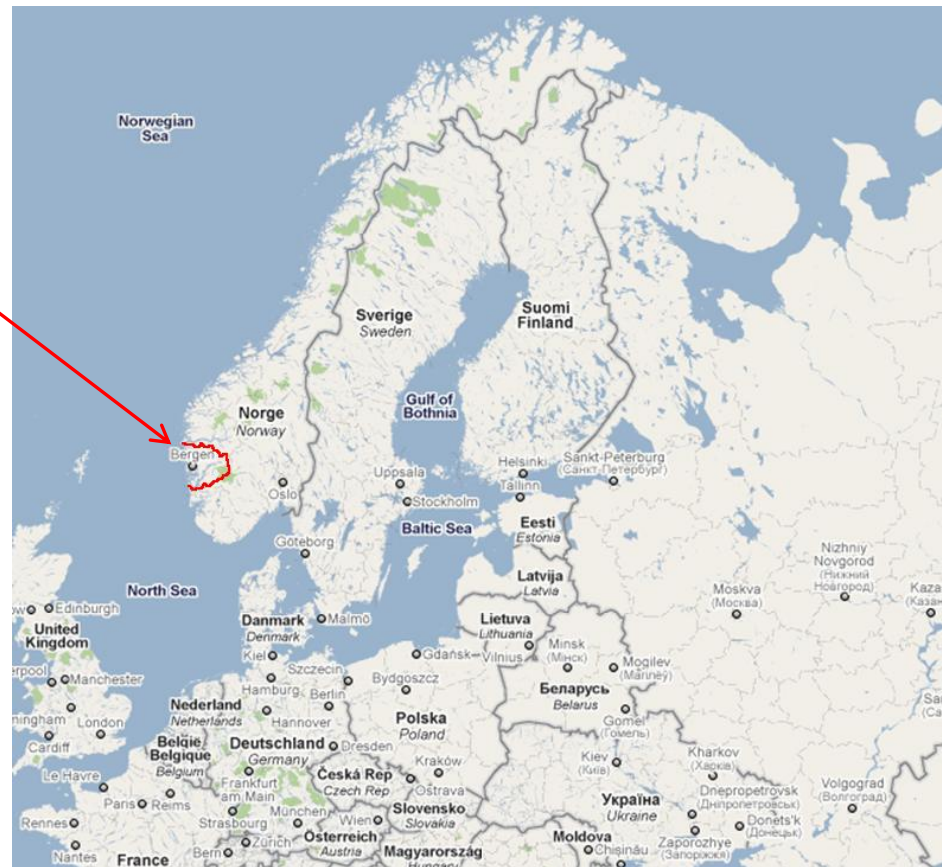


## Quick facts Hordaland county:

- Norway's third largest county (19 counties)
- Aprox. population 470 000
- 33 municipalities
- Aprox. 800 buses

## Quick facts Bergen city:

- Norway's second largest city
- Aprox. population 253 000
- Aprox. 500 buses



## Case: decision to use biogas in Bergen buses

### Background Hordaland County:

- Public administration in Norway has a structure with central government, county government and municipal government.
- County of Hordaland is composed by a county council of 57 members and an administration
- County of Hordaland has responsibility for public transportation
- Skys county owned company
- Hordaland has 33 municipalities one of them is the city of Bergen

## Case: decision to use biogas in Bergen buses

### Background Bergen City:

- Bergen municipality has a parliamentary political system composed by a city government elected by a city council
- Bergen has had 80 natural gas driven buses since 2000
- Bergen municipality is one of 7 municipalities owners of BIR, a Waste Management Company
- BIR is set to build the first biogas production facility in Hordaland



## Case: decision to use biogas in Bergen buses

Our goal:

- Keep the 81 gas buses operating in Bergen and not to replace them with diesel buses
- All buses shall run on biogas in the future
- All produced biogas has to be used for transportation purposes



## 6 Process framework

### 6) Project Management

1) Understanding the decision making process

2) Goal and goal scenarios

3) Insight and documentation

4) Communication

5) Creating and developing alliances

## Process 1: Understand the decision making process

- Understanding the decision making entities
- Understanding both collective and individual agendas
- Understanding party dynamics and position
- The role of power and who has the power
- Timing

## Process 2: Goal and goal scenarios

- The decision we want (optimal)
- The decision we like (compromise)
- Decision we can live with ...until the next round (depends on timing)

## Process 3: Insight and documentation

- Independent facts
- Focus on no special interests
- Understandable
- Legitimate sources
- Different sources

## Process 4: Communication

- Getting the message across
- Content
- Channel
- Repetition
- Who sends the message
- Get others to send the message

## Process 5: Creating and developing alliances

- Develop trusting relationships
- Meet the right people, know the people behind them and the people they represent
- Get a valuable third party: Get good ambassadors that represent your case: Give them a good case!
- Network and create support for the issue



## Process 6: Project Management

- Scope/goal
- Be process oriented
- Milestones
- Roles
- Deliverables
- Financing
- Sponsors
- Evolution and adjustment

## Philosophy of work - “positive attitude means everything”

- This is a learning process: reality is not black and white, it has many colors.
- You can always achieve something
- You are there to provide a viable solution
- Communication skills: make it easy to understand, translate to their own language and know when to stay in the background
- Collaborative attitude but do not be afraid to push if necessary

## Philosophy of work - “positive attitude means everything”

- Balance between what is confidential and what to communicate broadly
- Stick to the issue and the facts and do not fall into personal attacks if someone does not share your point of view!
- Give others ownership of the idea and make them ambassadors!
- Endurance is a virtue

## Conclusion of the 6 process framework

- Success depends on smooth processes and the right people and network
- You are not there to exercise power you are there to collaborate and present a viable solution
- Adjust your goal to the responses, this is a learning journey
- Stick to a philosophy of work which makes you a collaborator not an aggressive party
- You can always achieve something!

## Conclusion from HOG Energi's work in Bergen

### Decision from Hordaland County Council:

- 75 new gas buses to be purchased in Bergen
- Climate Plan for Hordaland county states that use of biogas and other renewable energy sources will be increased towards 2020. Biogas will be a priority in public transportation

### Decision from Bergen City Council:

- Produced biogas from Rådalen production facility shall be used in the public transport sector



**Thank you for your attention!**

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