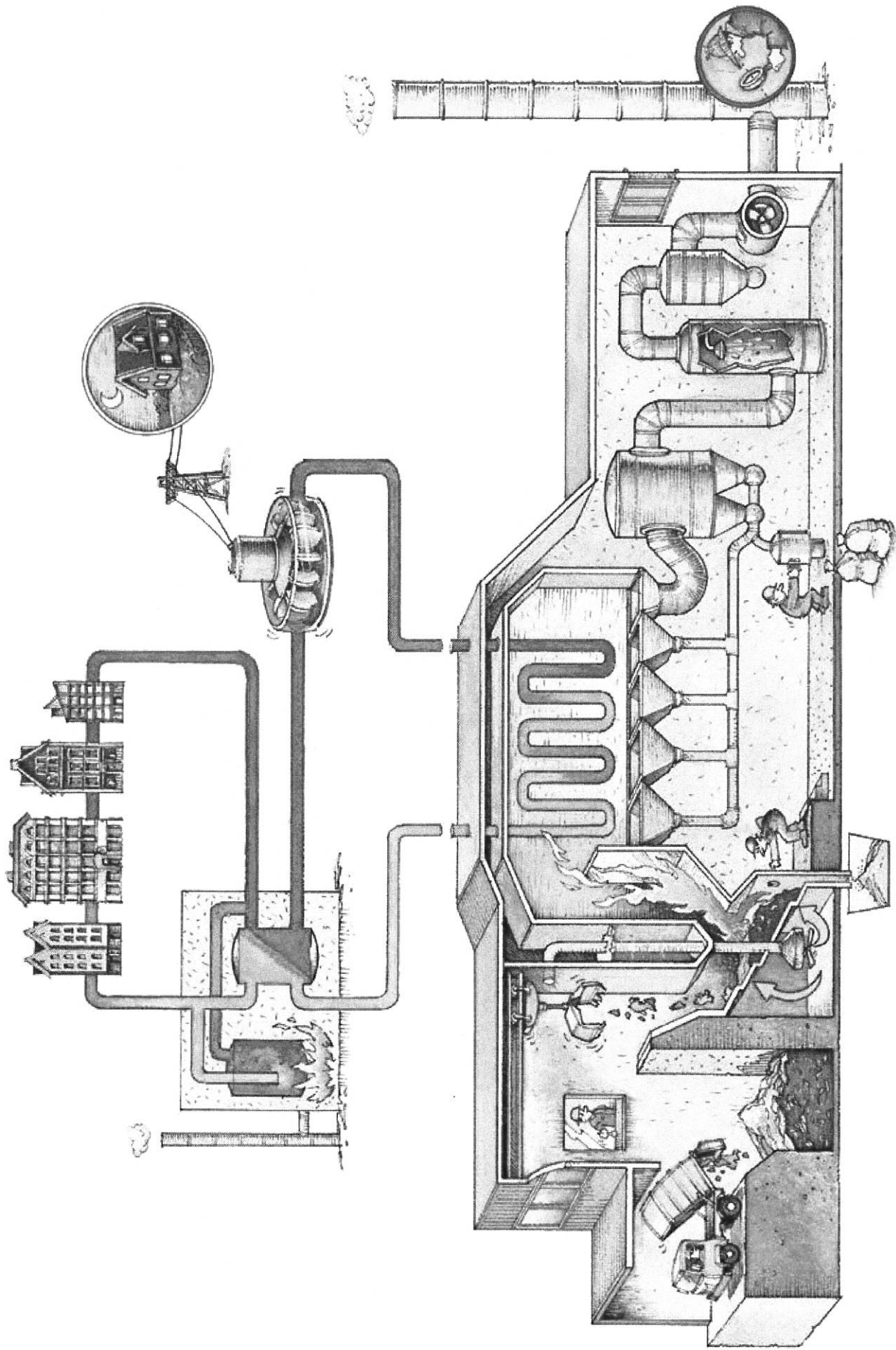




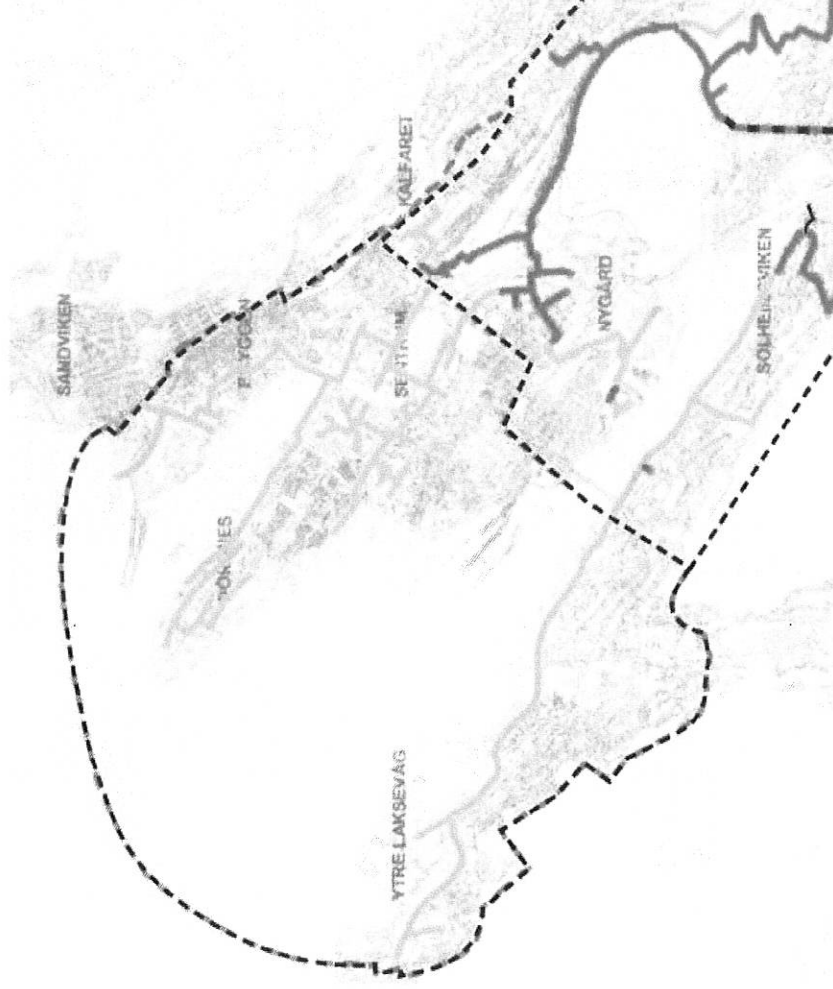
When building with high density, we have to offer a special attention to the spaces between the buildings. These urban spaces should be for all. They should be structured to encourage activity, participation and democracy in the city. In Bergen we are very proud of the urban spaces, and we experience that they add attraction to the city

Waste to energy



Stationary energy

Extension of district heating in the city centre

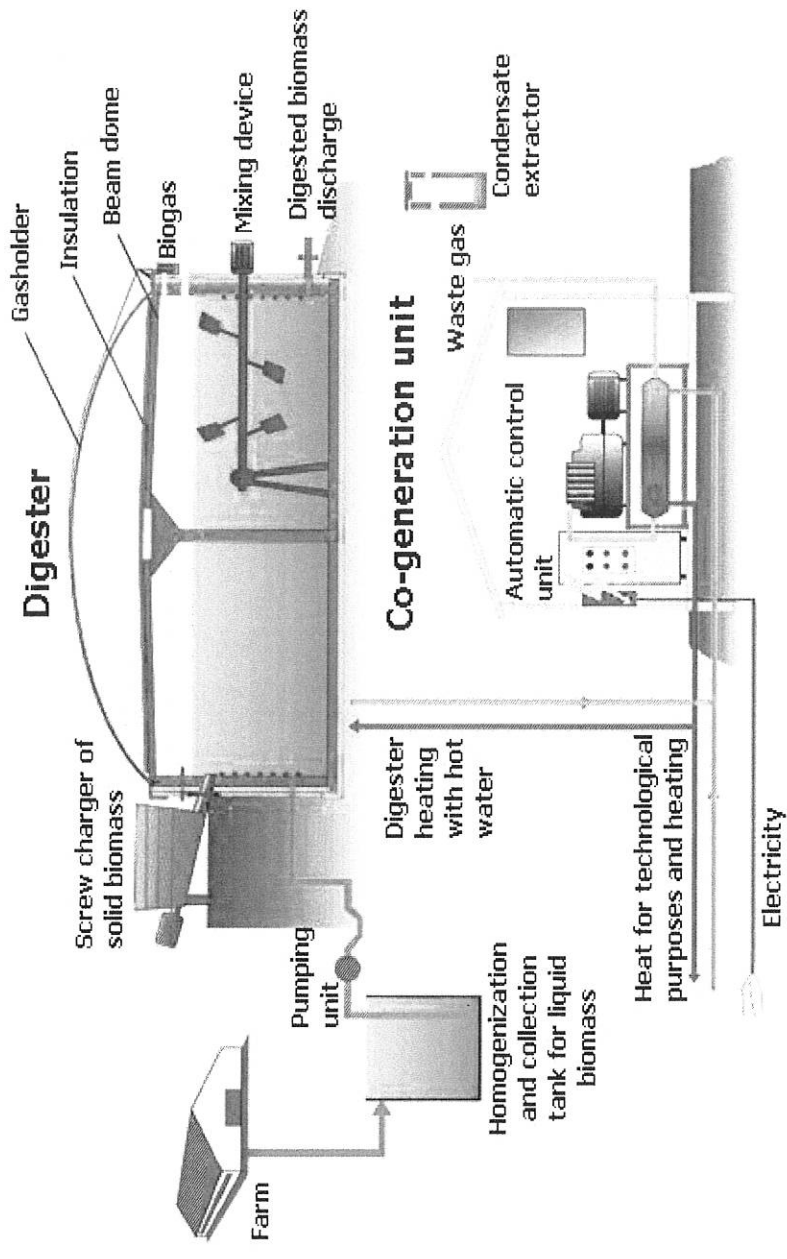


Local district heating network



Bio gas – from sludge to power

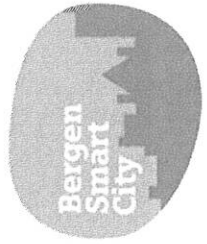
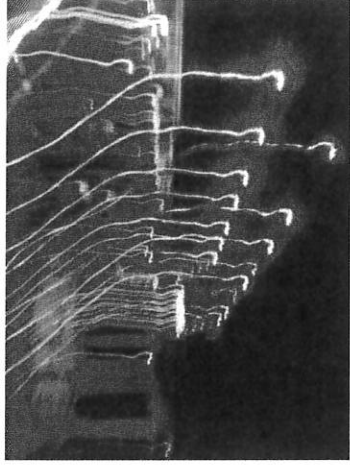
The city is building a bio gas plant



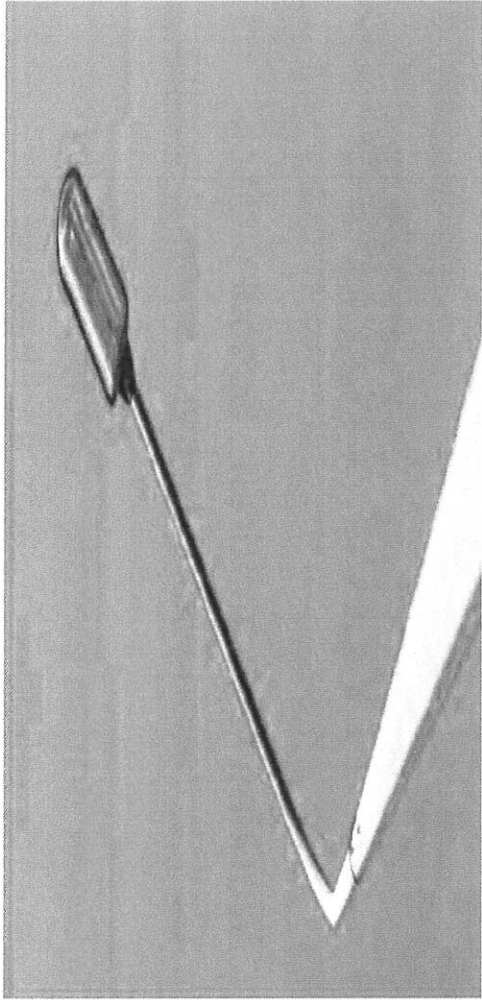
Street lighting

- a quantum leap in terms of energy efficiency improvement
- new regulations
- existing lighting a combination of new and older technology
- future: intelligent lightning

Taking part in campaigns like Earth Hour



Smartere bruk av energi



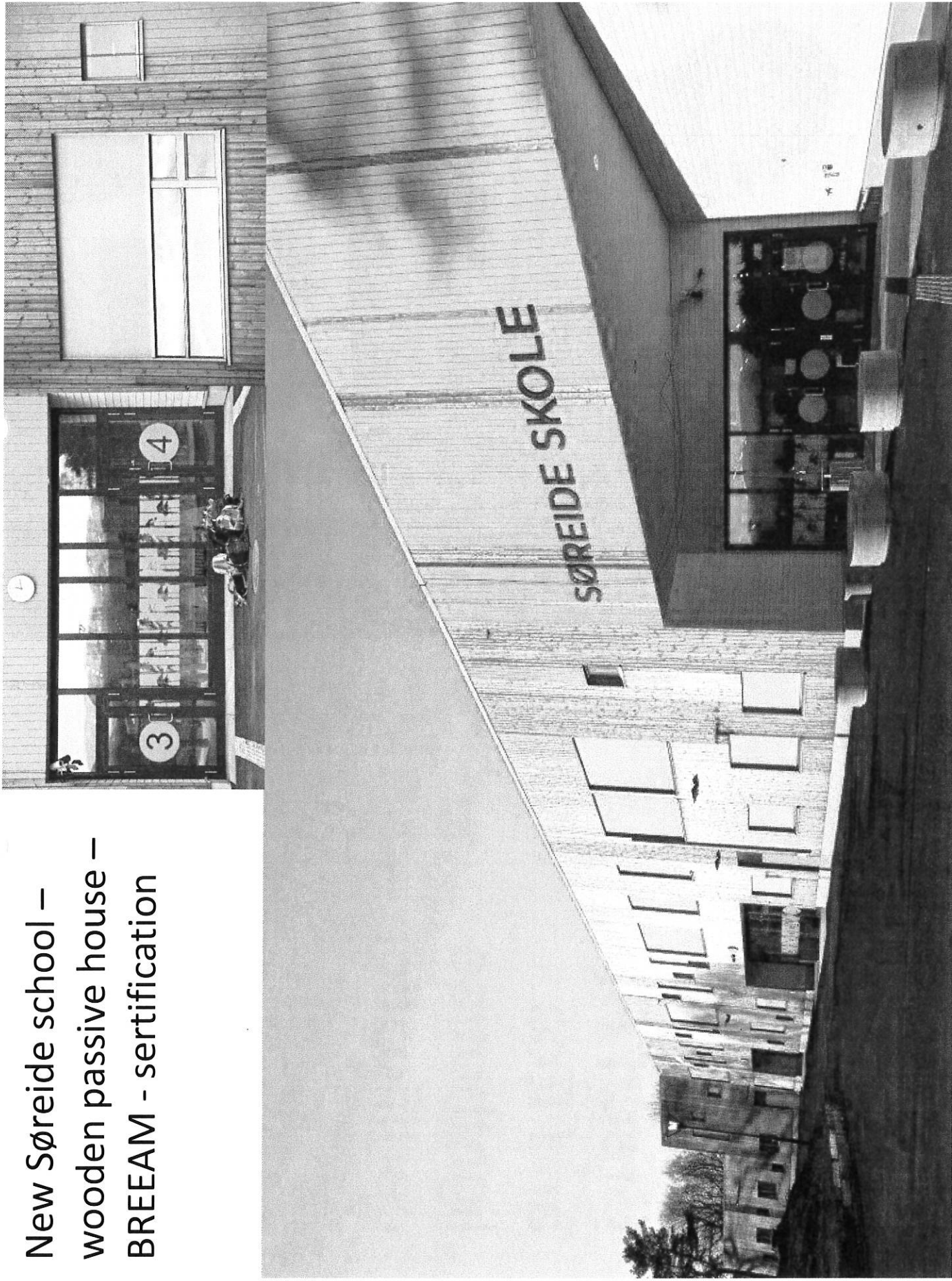
HER ER DET BLITTLYS!

Bytting av lyskilder til LED er en viktig del av kommunens arbeid for å redusere energiforbruket og miljøpåvirkningen. De nye lyskildene er mer energieffektive og har en levetid som er mange ganger så lang som de gamle. Dette betyr at kommunen sparer penger og miljøet blir bedre.

De nye lyskildene er også smarte. De kan styres via fjernsyn og kan slås av og på når det er behov for det. Dette betyr at kommunen kan spare energi og miljøet blir bedre.

Kommunen er også deltagende i kampanjen 'Earth Hour' og oppfordrer innbyggerne til å slukke lyset og spare energi.

New Søreide school –
wooden passive house –
BREEAM - certification



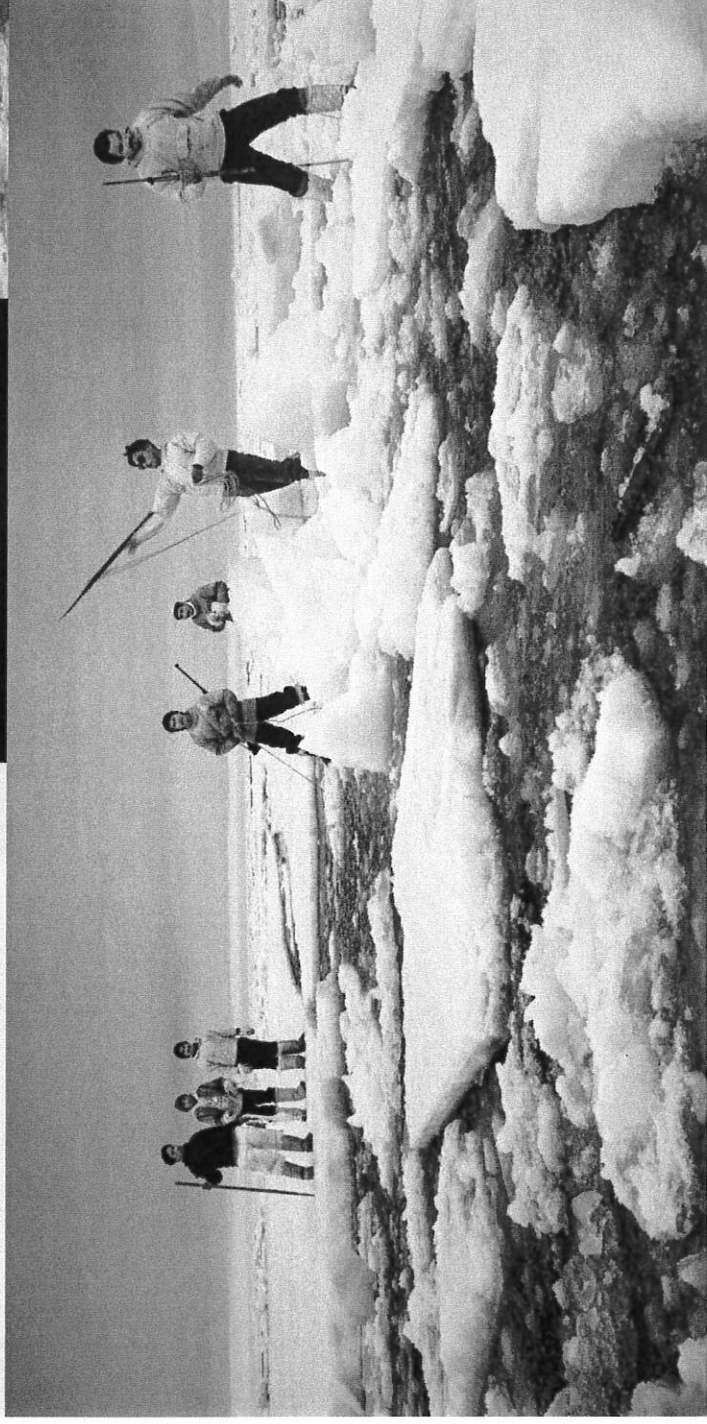
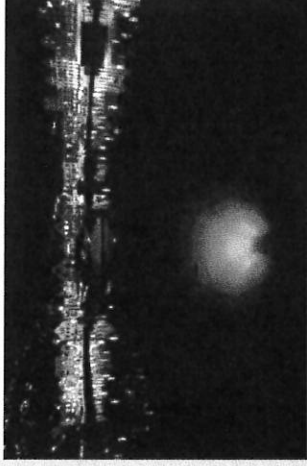
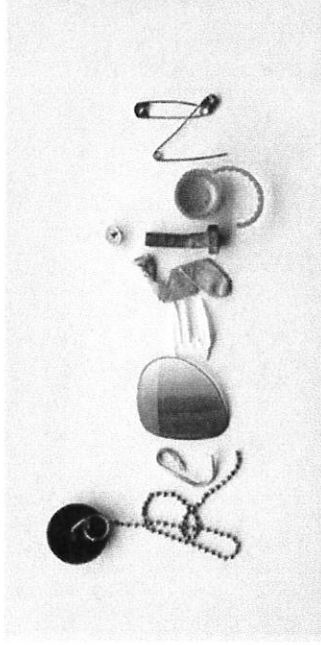
All units shall be certified

Green Flag and Eco lighthouse certification

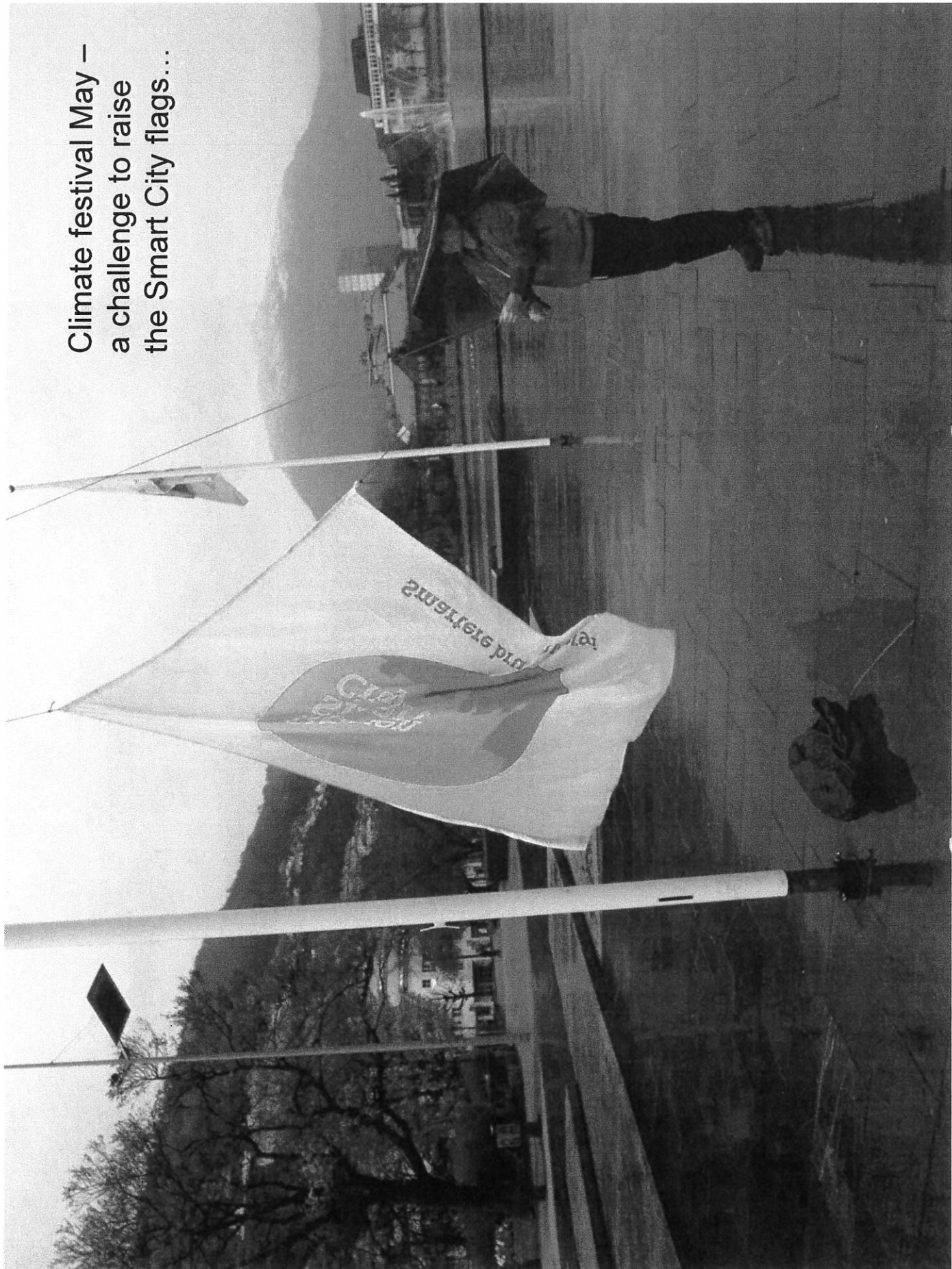


CITY OF BERGEN

Annual climate festival and climate weeks
with conferences, movies, concerts,
competitions etc



Climate festival May –
a challenge to raise
the Smart City flags...

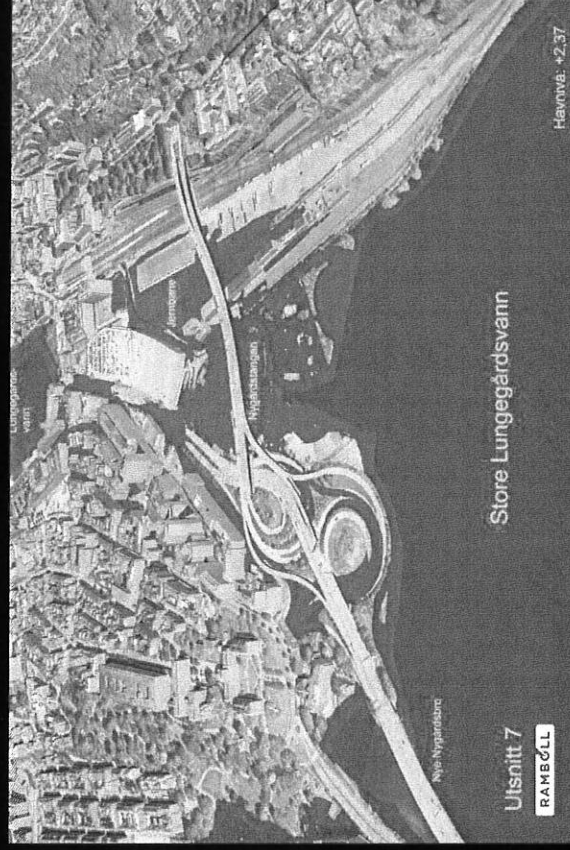
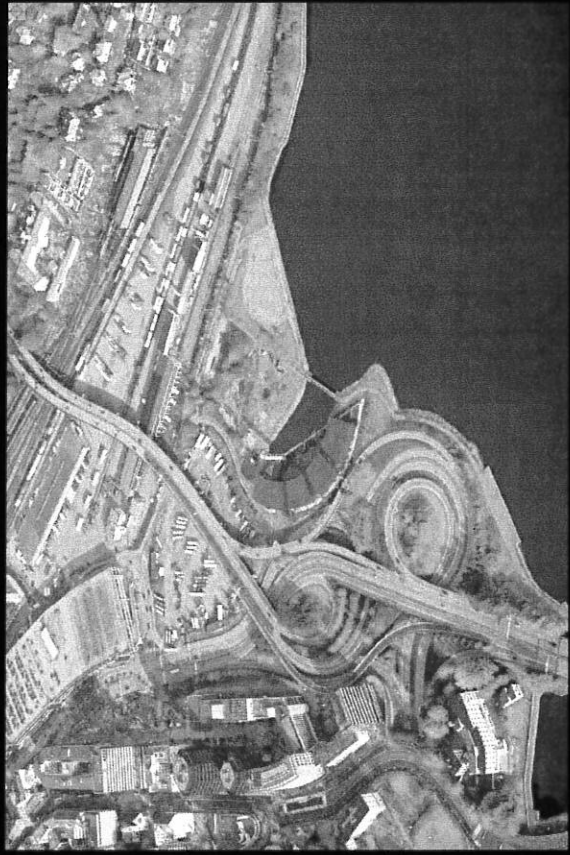


Adapting to climate change

Expected climate changes:

- Precipitation is expected to increase,
 - Higher risk for flooding
- Sea level and high tide is expected to rise
 - Overflowing the wharf and World Heritage site Bryggen and lower parts of the city
- More strong winds





100 years ahead the sea-level will be more than half a meter above today's level - we need to prepare for the changes - and we need to reduce the



Market hall – climate adapted



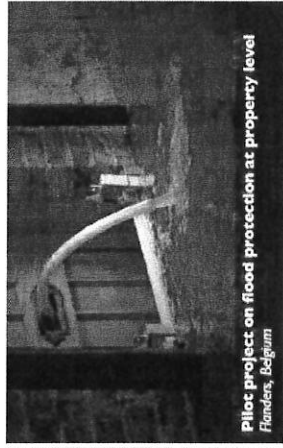
BERGEN KOMMUNE



Climate Adaptation Mainstreaming Through Innovation



New technologies: flood resilience
Hamburg, Germany



Pilot project on flood protection at property level
Flanders, Belgium



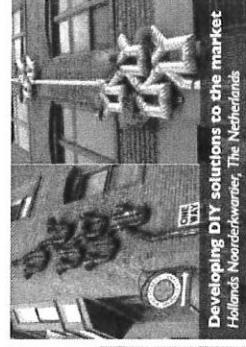
The Lungegård lakes, transforming a flood
Bergen, Norway



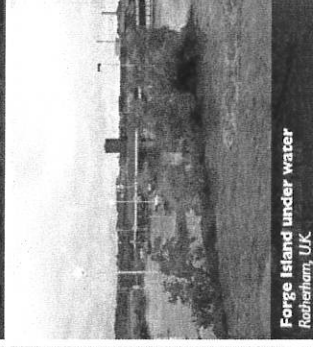
New governance and collaborative models
in 6 Learning and Action Alliances
Dordrecht, the Netherlands



New services: flood safety and business opportunity
Dordrecht, the Netherlands



Developing DIY solutions to the market
Hollands Noorderkwartier, The Netherlands



Forge Island under water
Rotherham, UK

Background

The plans for protecting cities against any kind of flooding often foresee large-scale adaptation of infrastructure.

The current economic circumstances make such investments less feasible causing climate adaptation initiative to stall.

Aim

Participants from the Interreg projects MARE, SKINT, SAWA, FRC and BaltCICA try to overcome the technical, governmental and financial barriers by supporting the development of innovative products and services and financially feasible governance approaches.

Approach

Policy makers, industry and researchers collaborate to further develop innovative business cases and governance approaches in 3 steps:

- Mapping investments in infrastructure and maintenance to identify mainstreaming opportunities;
- Identifying synergic projects with climate adaptation;
- Identifying business cases

Results

CAMINO will help to mainstream climate adaptation by delivering:

- Pilots in six cities that showcase novel governance structures and the use of novel technologies
- Future perspectives describing the potential benefits and challenges for a large-scale uptake of solutions on a local, national and EU-level.

Impact

The partners work together to demonstrate approaches that reconcile climate adaptation and economic growth.

For other cities the solution could provide new routes to take up.

For involved business the solutions could provide new opportunities for business.

Initiative VS	Horizon
2013-2015	6
700 € ERDF	300 € ERDF
City of Dordrecht	





BERGEN KOMMUNE

Thank you for your attention!

www.facebook.com/klimaseksjonen

