Drammen - The ugly duckling that became a beautiful swan

Norwegian Policy Instruments - Developing Sustainable Cities
UNECE - Geneve, September 21st, 2010
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Jomar Lygre Langeland
Chief Town Planning and Building Department, City of Drammen, Norway
Drammen: Attractive and Sustainable?

1. Local and Institutional Context
2. The Transformation of Drammen; Strategies
3. Norwegian Programme; "Cities of the Future"
4. Future Ambitions and Challenges
5. Discussion: Lessons Learned
1. Local and Institutional Context

The ugly duckling that became a beautiful swan

Drammen: 63 000 inhabitants (2% Y growth)
Regional center for 150 000 inhabitants
Location: 41 km SW of Oslo (36 min)
Integrated part of the Oslofjord region
1. Local and Institutional Context

Drammen has been populated since the stone age – 6500 years old stone carving
Drammen has been populated since the stone age – 6500 years old stone carving

The Dutch started buying timber in the 14th century

1. Local and Institutional Context

The ugly duckling that became a beautiful swan
Drammen has been populated since the stone age – 6500 years old stone carving

The Dutch started buying timber in the 14th century

The physical development of Drammen has largely followed industrial growth, town fires (1866), the building of roads and railway, and increasing population.
In the 1950’s the industrial- and port development of Holmen started, and necessitated new bridges, then part of the E 18. And, incidentally, dividing Strømsø into two. Later, in 1975, the motorway bridge was built.
1. Local and Institutional Context

In the 1960’s, 70’s and 80’s the need for housing increased. New "satellite"-neighbourhoods developed in the hills outside the existing urban area.
1. Local and Institutional Context

In the 1960’s, 70’s and 80’s the need for housing increased. New “satellite”-neighbourhoods developed in the hills outside the existing urban area. The city centre was forgotten. The river was polluted, the traffic terrible and the environmental challenges for the city going into the 1990’s were tremendous.
1. Local and Institutional Context

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1. **Local and Institutional Context**

Responsibilities; different policy instruments for land-use and transportation

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Responsibilities; different policy instruments for land-use and transportation

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Strong sector-divided state: Responsible for laws, framework for planning, national budgets, etc.
1. **Local and Institutional Context**

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1. Local and Institutional Context

Osland and Kråkenes (1998) described the current institutional system for promoting public transportation in Norway as follows:

“The established organizational structure is suitable if you want a further increase in car usage in metropolitan areas, and if you at the same time find it suitable that nobody clearly can be pointed out as responsible for this development.”
2. The Transformation of Drammen; Strategies

1. Cleansing of the river 1986 – 95, plan for sewage handling

The ugly duckling that became a beautiful swan
2. The Transformation of Drammen; Strategies

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The ugly duckling that became a beautiful swan
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2. The Transformation of Drammen; Strategies

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2. The Transformation of Drammen; Strategies

2. Riverbank redevelopments 1994 – 2007
The ugly duckling that became a beautiful swan

2. The Transformation of Drammen; Strategies

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2. The Transformation of Drammen; Strategies

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2. Riverbank redevelopments 1994 – 2007

Previously

Now
2. The Transformation of Drammen; Strategies

2. Riverbank redevelopments 1994 – 2007

Now
The ugly duckling that became a beautiful swan

2. The Transformation of Drammen; Strategies

2. Riverbank redevelopments 1994 – 2007

Previously

Now
2. The Transformation of Drammen; Strategies


- E134 Drammen – Mjøndalen
  Åpnet 2001

- Øvre Sund bru
  Bygges 2008-11

- Kreftings gate
  Åpnet 2006

- Gatebruk Bragernes
  Ferdig 2004

- Bragernes-tunnelen
  Åpnet 2002

- E18 4-felts motorveibru+
  Kleivenetunnel
  Åpnet 2007/2008

Tilfartsvei vest / Tilfartsvei
Konnerud
Plan foreligger. Ikke finansiert.

E18 4-felts motorveibru+
Kleivenetunnel
Åpnet 2007/08

RV319 Svelvikveien
(utenfor kartet)
Ny utredning og plan påkrevd. Ikke finansiert.
2. The Transformation of Drammen; Strategies


Previously

Now

The ugly duckling that became a beautiful swan
2. The Transformation of Drammen; Strategies


The ugly duckling that became a beautiful swan

2008 Norway’s Best public space
2. The Transformation of Drammen; Strategies


2004 Norway’s Beautiful roads’ prize
2. The Transformation of Drammen; Strategies


River festival
The ugly duckling that became a beautiful swan

2. The Transformation of Drammen; Strategies


World cup cross-country sprint
The ugly duckling that became a beautiful swan

2. The Transformation of Drammen; Strategies

4. “String” development along the river
2. The Transformation of Drammen; Strategies

5. City axis / inner city investments with high quality, based on the concept of “Naturbania”
The ugly duckling that became a beautiful swan

2. The Transformation of Drammen; Strategies

5. City axis / inner city investments with high quality, based on the concept of “Naturbania”

Focus on city life and ground floor activities
The ugly duckling that became a beautiful swan

2. The Transformation of Drammen; Strategies

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2. The Transformation of Drammen; Strategies

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New indoor swimming pool 2008
2. The Transformation of Drammen; Strategies

5. City axis / inner city investments with high quality, based on the concept of “Naturbania”

2005 Norway’s Best public space
The ugly duckling that became a beautiful swan

2. The Transformation of Drammen; Strategies

5. City axis / inner city investments with high quality, based on the concept of “Naturbania”

Airport express train, 2009
The ugly duckling that became a beautiful swan

2. The Transformation of Drammen; Strategies

6. Hold on to the strategies over time. Long-term and determined effort provide the results

- 2003 Norway’s Environmental prize for cities
- 2007 Norway’s Steel prize
- 2009 European Steel prize
The ugly duckling that became a beautiful swan

2. The Transformation of Drammen; Strategies

6. Hold on to the strategies over time.
Long-term and determined effort provide the results

2008 European Planning Award
3. Norwegian Programme; "Cities of the Future"

Cities of the Future (2008-2014) is a collaboration between the Government and the 13 largest cities in Norway to reduce greenhouse gas emissions and make the cities better places to live.
3. Norwegian Programme; “Cities of the Future”

Fields of Action:
1. Land Use and Transport
2. Energy and Buildings
3. Consumption and Waste
4. Climate Change Adaptation

- Dense, functional city centres, enhancing public transport, cycling and walking, limiting parking and car usage
The ugly duckling that became a beautiful swan

3. Norwegian Programme; "Cities of the Future"

Fields of Action:
1. Land Use and Transport
2. Energy and Buildings
3. Consumption and Waste
4. Climate Change Adaptation

- Energy use, energy sources, energy supply, climate friendly materials, information and competence
3. Norwegian Programme; "Cities of the Future"

Fields of Action:
1. Land Use and Transport
2. Energy and Buildings
3. Consumption and Waste
4. Climate Change Adaptation

- Waste treatment and recycling, waste prevention, consumption pattern, procurement, green management
3. Norwegian Programme; "Cities of the Future"

Fields of Action:
1. Land Use and Transport
2. Energy and Buildings
3. Consumption and Waste
4. Climate Change Adaptation

- Precipitation, flood, landslides, sea level, wind
4. Future Ambitions and Challenges

The vision formulated in the master plan for 2007 – 2018:

“The environmentally sound and proficient city of Drammen: a dense, diverse and vibrant city in a beautiful setting”
4. Future Ambitions and Challenges

Focus on the Strømsø side
4. Future Ambitions and Challenges

Strømsø square and renovation of the railway station
The ugly duckling that became a beautiful swan

4. Future Ambitions and Challenges

The gift to the 2011 anniversary from trade and commerce, on Strømsø torg
4. Future Ambitions and Challenges

Private investments
- hotel

The ugly duckling that became a beautiful swan
4. Future Ambitions and Challenges

2011: Drammen park - new concept
The ugly duckling that became a beautiful swan

4. Future Ambitions and Challenges

Drammen 2009: Plans for peripheral shopping centre turned down

Land Use and Transport
## 4. Future Ambitions and Challenges

**Drammen 2009: Increased car parking fees**

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4. Future Ambitions and Challenges

Drammen: Situation today

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4. Future Ambitions and Challenges

The ugly duckling that became a beautiful swan

Drammen 2010: Zone-parking for inhabitants

Land Use and Transport
4. Future Ambitions and Challenges

The fact is that we do not achieve our goals for a sustainable development:

- Traffic increases – 70% car use today
  - Public transport is underdeveloped
- Restrictive action is not implemented
  - Uncoordinated regional strategies
  - Municipalities compete

The ugly duckling that became a beautiful swan
4. Future Ambitions and Challenges

New insights today? Do we have a problem to solve?
Do we have enough information, transparency and moral understanding?
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4. Future Ambitions and Challenges

*Buskerud City – a regional land use and transport strategy.*
*A region that deserves government “reward” funds*
4. Future Ambitions and Challenges

A climate friendly ideal model for regional planning in Buskerud City
4. Future Ambitions and Challenges

300 m: High density land use; office, culture, trade, commerce
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4. Future Ambitions and Challenges

500 m: High density housing
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4. Future Ambitions and Challenges

1000 m: Eventually housing
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4. Future Ambitions and Challenges

Existing main nodes in railway network

Land Use and Transport
4. Future Ambitions and Challenges
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4. Future Ambitions and Challenges

Existing secondary nodes

Land Use and Transport
4. Future Ambitions and Challenges

Possibly new secondary nodes

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The ugly duckling that became a beautiful swan

4. Future Ambitions and Challenges

Local public bus transport to each regional node
4. Future Ambitions and Challenges

Superbus between regional nodes

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4. Future Ambitions and Challenges

Attractive bike-routes between regional nodes
The ugly duckling that became a beautiful swan

4. Future Ambitions and Challenges

Attractive pedestrian and bike routes to each regional node
4. Future Ambitions and Challenges

Park-and-ride for commuters towards Oslo at train stations
4. Future Ambitions and Challenges

Park-and-ride for commuters to a regional node
4. Future Ambitions and Challenges

Car-restrictions in each node

Land Use and Transport
The ugly duckling that became a beautiful swan

4. Future Ambitions and Challenges

Road pricing will be considered
4. Future Ambitions and Challenges

No new road capacity, instead use means named above
5. Discussion: Lessons Learned

Consequences for you and me – what is the alternative?

“When I started to ride my bike to kindergarten I also got time to exercise”

Jomar Lygre Langeland

The ugly duckling that became a beautiful swan
4. Future Ambitions and Challenges

Financing – a package for investments and public transport

- "Buskerud-citypackage 1"
  - State reward funding
  - 2010

- "Buskerud-citypackage 2"
  - With both local road pricing and state reward funding
  - 2014

The ugly duckling that became a beautiful swan
5. Discussion: Lessons Learned

Buskerud city – regional land use and transportation strategy. Will we succeed? What is the alternative?
4. Future Ambitions and Challenges

The ugly duckling that became a beautiful swan

4. Future Ambitions and Challenges

Future Built - exhibition

First "passive house" School (2010)
The ugly duckling that became a beautiful swan

4. Future Ambitions and Challenges

First "passive house" Kindergarten (2010)
4. Future Ambitions and Challenges

Future Built - exhibition

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Refurbishment

Energy and Buildings
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4. Future Ambitions and Challenges

FutureBuilt – conceptual competition

Energy and Buildings
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4. Future Ambitions and Challenges

Strømsø, the new skyline

Energy and Buildings
4. Future Ambitions and Challenges

Look to Strømsø – 1. prize (Norconsult and Alliance Arkitekter)

More info on web: futurebuilt.no
4. Future Ambitions and Challenges

Municipal strategies - examples:

• All municipal branches are now certified (2010)
• "Clean our own backyard" before setting demands for others
• Developing a Mobility Strategy for the municipality (2010)
• Developing Mobility Plans for each municipal branch (2011)
• Developing a Car Share Marked for public authorities and inhabitants (2011)
4. Future Ambitions and Challenges

Municipal strategies - examples:

- Heavy rain: Demand: Surface water strategy in land use plans
- Heavy rain: Mapping small rivers and waterways
- Flood: Setting demands for technical installations in buildings (only above +2.3m above sea level)
- Landslide: Setting demands for ground investigation before building permits
5. Discussion: Lessons Learned

For the discussion later....

**Local success criteria:**
Develop a robust vision, stick to your plan over time. Find opportunities to cooperate with state government; find common goals. Find inspiration both to politicians and the administration. Focus your investments. Build quality.
5. Discussion: Lessons Learned

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Local success criteria:
Develop a robust vision, stick to your plan over time. Find opportunities to cooperate with state government; find common goals. Find inspiration both to politicians and the administration. Focus your investments. Build quality.

Regional success criteria:
If there is competition between your local authorities, make a regional forum for planning, especially if your state government has made a reward system for “good behavior”.

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Local success criteria:
Develop a robust vision, stick to your plan over time. Find opportunities to cooperate with state government; find common goals. Find inspiration both to politicians and the administration. Focus your investments. Build quality.

Regional success criteria:
If there is competition between your local authorities, make a regional forum for planning, especially if your state government has made a reward system for “good behavior”.

National / global success criteria:
Climate friendly behavior must be rewarded economically. Develop incentive systems for local authorities.
5. Discussion: Lessons Learned

We have all we need, perhaps with the exception of political willingness...

...but political willingness is a renewable resource. 
Al Gore, Nobel Laureate
Thank you for your attention.

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