



IEA Bio-energy

**Promoting, building and using
bio-energy as a local resource of
energy – ”a mayors experience”.**

Presentation 18. June 2010



Åmot municipality - facts

- 4300 inhabitants, 1300 km² - 3,3 persons pr km²
- Municipality: annual budget 210 mill NKR = 30mil US \$
- Main "industries": army, university college, tourism.
- Natural resources: forestry (900 km²), hydro power (300 GWH)
- Goals for the mayor: develop new industries, increase production of renewable energy, reduce carbon emissions, increase population, modernize municipality



Regional cooperation:

- Project Green development in Sør Østerdal – cooperation between 5 municipalities, budget of 2 mill NKR
- University college, Evenstad and Rena – 5 mill NKR
- Participating in government project "Grønne energikommuner" – KRD/KS, budget 1,5 mill NKR
- Proposition: Green economic zone to promote new industry development, tax incentives, etc



History Åmot municipality

- 1997 Opening of the Rena military camp – hydronic heating system - heated with oil – 170.000 m²
- 1998 Close-down of Rena Karton (paper mill)
- 2002 New municipal plan – encourages renewable energy solutions in Rena Camp and in "Rena south" (Formerly the industrial site "Rena Karton")



Åmot
kommune



www.amot.kommune.no



History Rena military camp

- 1994: Rena camp is being built - first initiative for a bio-energy solution.
- 1998 – 2002 – 2003. Several initiatives and project reports. No results.
- February 2004: press conference – Forsvarsbygg, Åmot municipality and locale forest owners starts a joint project for "Heat production and industrial development at Rena Camp" and "Area plan process for district heating system at Rena Camp". Finished october 2004



History 2004

- November 2004: Parliamentary committee on defense supports bio-energy solution for Rena Camp
- 8. December: Forsvarsbygg announces an open competition for bio-energy solution at Rena Camp 1. quarter 2005
- Army budget deficit: 1bill NKR



Parliamentary committee statement 2004

- "Komiteen vil peke på at Forsvaret bør benytte alternative, fornybare energikilder der dette er mulig, og vil peke på at dette særlig kan skje under ombygging/utvidelser og nybygg. Komiteen vil peke på at Forsvaret som en stor aktør i mange lokalsamfunn kan bidra til at alternative energiløsninger også får et volum som kan gi betydelige synergieffekter for lokalsamfunnet rundt forswarets anlegg.
- Komiteen vil peke på Rena Leir som eksempel, der det er lagt til rette for vannbåren varme, og der det nå bør ligge godt til rette for innfasing av bioenergi som energikilde. Komiteen ber om at det vurderes om det for eksempel ved offentlig-privat samarbeid kan være i Forsvarets interesse med innfasing av bioenergi som energikilde, ved at dette viser seg å være både en miljøvennlig og kostnadseffektiv løsning."



History 2005-06-07-08

- 28 August 2005: Open competition announced - six months delayed. ("Not my budget")
- December 2005: Forsvarsbygg announces a winner – local company – estimated savings of 3,8 mill NKR pr year (0,6 mill US \$)
- February 2006: Forsvarsbygg calls back competition due to formal complaints. Will start new competition. June 2006 Meeting with Defense Minister to affirm this.
- October 2006: New competition. November 2007 New winner. Fall 2008 Opening of bio-energy plant.

2006 PM: Forsvaret har vurdert å bygge et biobrenselanlegg på Rena i egen regi eller en løsning med kjøp av ferdig varme. Det er mest fordelaktig for Forsvaret å gå inn på en langsiktig avtale om kjøp av ferdig varme, og Forsvarsbygg vil derfor i løpet av denne høsten lyse ut en konkurranse om kjøp av ferdig varme til Rena leir basert på biobrensel.





History Åmot municipality

- May 2006 revision of municipal plan: "Consider establishing a district heating system in Rena center." and "The municipality should establish a local heating system for municipal buildings in the city center."
- December 2006 Open competition on local heating solution. May 2007 – contract with local company. November – up and running!
- Municipality applies for permit to establish a district heating monopoly. Permit granted nov 2007
- August 2008 Municipal plan for energy and climate – various activities



Rena center

- February 2008 Compulsory to connect to district heating system and to have hydronic heating system for all new buildings in city center. **Controversial.**
- 2008 Forsvarsbygg: Contracts on building of 120 small apartments in city center, north and south. Opening February and August 2010
- 2011 Hooking up of University College? New shopping center.

– Tilknytningsplikt er rene voldtekten

- SKEPTISK: Hans Petter Wahl Adolfsen (Ap) mener det ikke er riktig å innføre tilknytningsplikt til fjernvarmeanlegg for alle nybygg over 200 kvadratmeter. Det gjentok han på formannskapsmøtet i går, her med partikollega Mona Strand.





Conclusion

- Goals of developing new industry, increase in energy production – potential 30-40 GWH, reduction of climate emissions.
- Demand for and consumption of forest fibers as with Rena Karton – 35.000 fkm
- Synergy effects? EU-rules for competition is a problem
- Ability to change? "Not my table", Shortage of competence.
- Regional cooperation useful, but limited by politics.