



posten



bring



Trondheim city experience

Implementation path and process undertaken

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Norway Post, Trondheim



Contents

- Trondheim
- Norway Post Group
- «CO2-free post distribution in Trondheim city centre»
 - the project
- Further work and plans
- Experiences

Trondheim



176 348 inhabitants 31.12.2011

Founded in 997 a.c.

3 trd biggest town i Norway



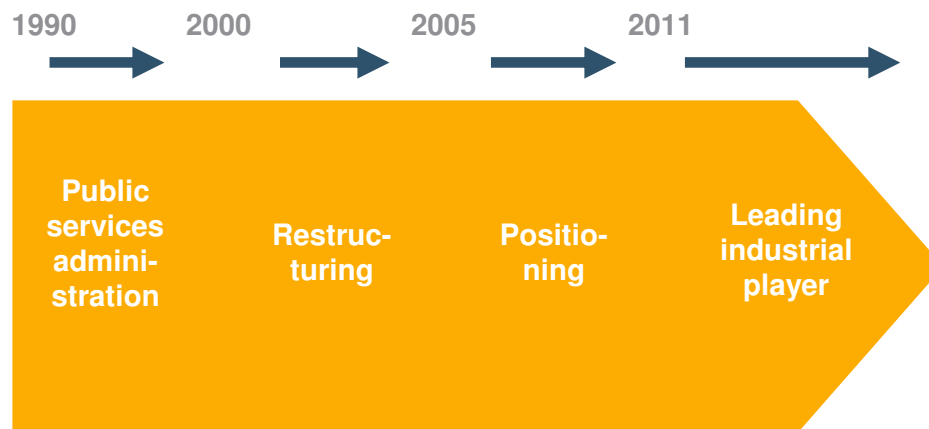


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Norway Post in short



- Group revenue: 22.5 bill. NOK (2.9 bill. Euro)
- EBIT: 943 MNOK (120 MEURO)
- 20.000 employees
- 2 main business areas:
 - Mail
 - Logistics
- Nordic Region as home market
- 26.5% of total revenue from subsidiaries outside Norway
- Subsidiaries in: Sweden, Denmark, Finland, Estonia, United Kingdom, Holland, France, Greece, US, Hong Kong





The group is a significant post and logistics provider – environment is one of the group’s two CSR areas

The group has established ambitious goals where carbon management is the key

Parameter	Goal
CO2 emissions from transport	Reduce by 30 % within 2015 (2008 baseline)
Energy use in buildings	Energy consumption reduced by 15 % within 2015
Waste	91 % of waste recycled by 2015



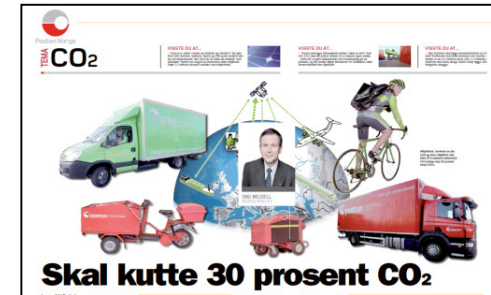


Contents

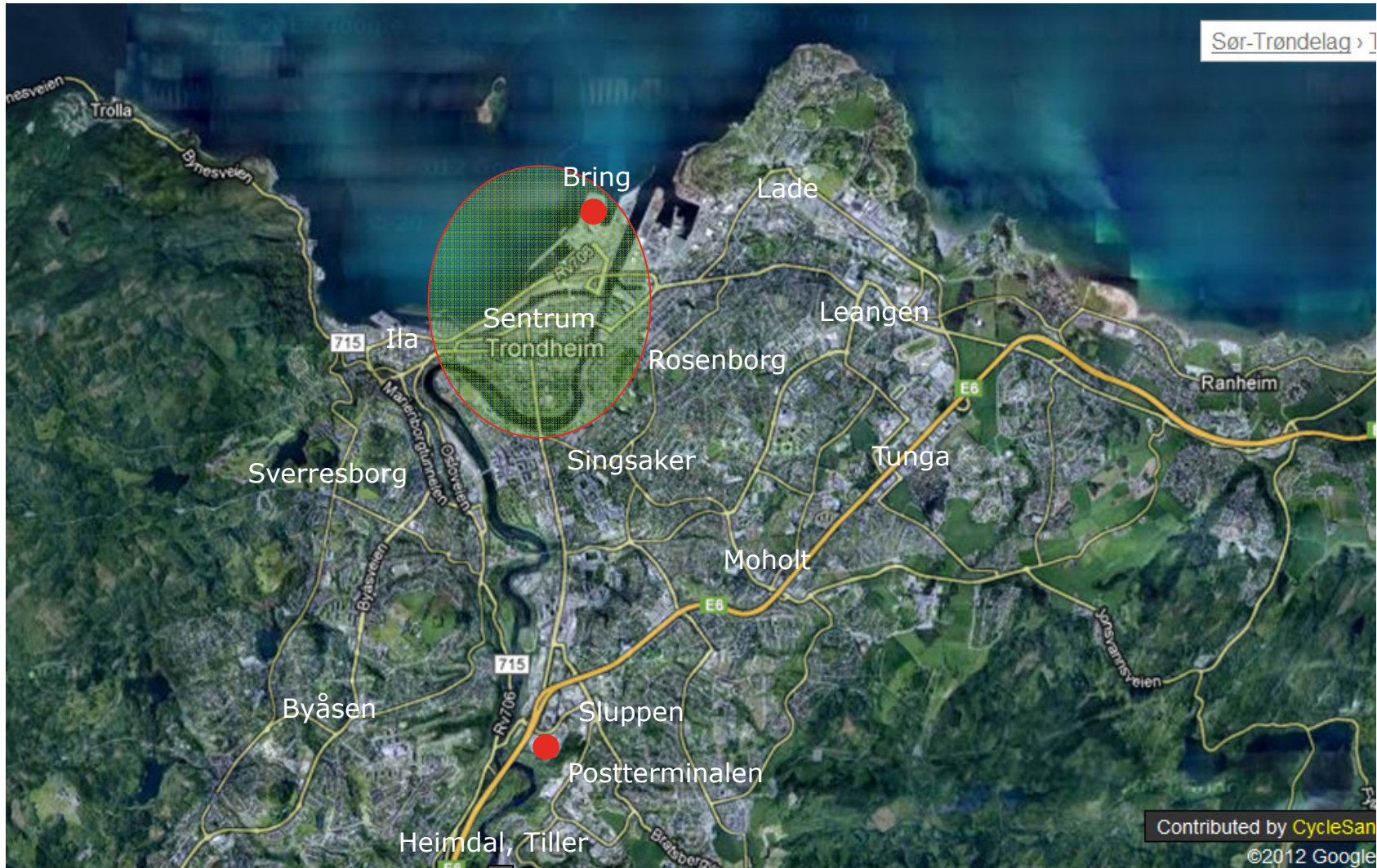
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Background of the project

- Clear goals on reduction of CO2 emissions in Norway Post Group
- Ambitious goal of cuts in carbon dioxide emissions in Trondheim municipality
- Reduced availability for goods delivery in Trondheim city centre
- Reduced incomes and cost cuts



Trondheim city center

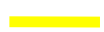


Logistics solutions

Winter 2010



Scheduled for autumn 2011



Mail delivery



Parcel distribution



Trondheim postterminal
5 km south of Trondheim.

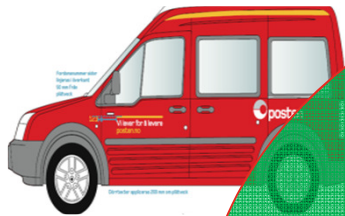
New eco-friendly equipment

Winter/spring 2010

Delivery of snail mail

May 2012

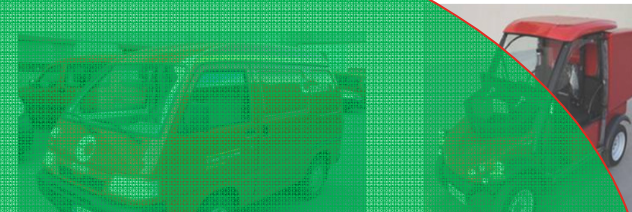
5 diesel/gasoline vehicles



Ca. 7 tonnes of CO2 emissions per year

2 electric trolleys

2 e-jeeps
1 Piaggio Postel Electric van

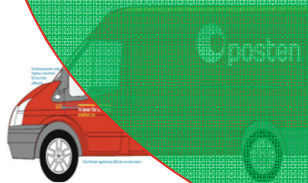


Ca. 2 tonnes of CO2 emissions per year;



Approximately 73% achievement

6 diesel/petrol cars



Ca. 23 tonnes of CO2 emissions per year

2 Goupil G3 (el)
1 Goupil G5 (el)
1 Iveco Daily Hybrid electric-diesel
2 petrol trucks



Ca. 8 tons of carbon emissions per year



Attention in media

NRK Nyheter • Distrikt-NRK Trøndelag

Trøndelag E-post: trondheim@nrk.no

Posten med CO2-fri transport

Posten i Trondheim vil erstatte bilene med CO2-frie kjøretøy.
Foto: Bård Lindseth/NRK

Posten i Trondheim skal kjøre helt CO2-fritt i deler av Trondheim innen neste år. Lykkes de, kommer flere byer etter.

LARS ENIK SKJURSEN/NTB KAROLINE PAULSEN ÅKERSTAD
lars.enik.skjursen@nrk.no karoline.paulsen@nrk.no

Publisert 03.08.2010 21:43

Totalt er mål et å redusere postens totale utslipp med 30 prosent innen... Næste bildeserier

Norwegian transport minister on visit

Freitag, 7. Oktober 2011

SPIEGEL ONLINE SPIEGEL TV

adressa.no | TV-adressa

Postens nye el-varebil

Det er nærliggende å tenke på Postmann Pat når postens nye el-donng ruller forbi. Nå blir postleveringa CO2-fri i Midtbyen.

Abonner Del Twitter TipsDin SkrivSenc

- Postmann Pat-komentarene har tidobla seg, forteller postmann Bakken.

CHRISTINE SCHEFFTE
Mobil: 532 23 694
Publisert: 19.01.2011 kl. 22:00
Endret: 20.01.2011 kl. 11:26

- Trondheim sentrum skal bli CO2-fri når det gjelder postlevering, sier regiondirektør Odd Roger Tiller i Posten.

Målet er å redusere Postens totale utslipp med 30 prosent innen 2015. I fjor fikk Posten 1,8 millioner kroner fra Transnova, til nettopp dette formålet.

Framtidsrettet

- Jeg tror dette er framtid, sier Raymond Bakken, som nylig demonstrerte den nye el-varebilen for TV-adressa.

- Men kommentarene er mange ja, humrer han mens han kjører rute 7012 rundt Leuthenhaven.

Se video av el-varebilen i klippet over.

Like 181 innlegg 10/10

Abonner Del på Facebook Tweet Del i RSS Del i RSS Del i RSS Del i RSS Del i RSS Del i RSS

m/7page=articles&id=108

EMNEORD

Trondheim sentrum Tiller Posten Trondheim

DET BESTE UTVALGET FRA NORGS STØRSTE DØR- OG VINDULAGER

NorDan
KVALITETS VINDU

120x120
0-rd. 7403,-
2990,-

VI HAR OVER 400 KVALITETS VINDU PÅ LAGER - KLICK HER >>>

Tore Ligaard's
ÅPENT: Mandag-Fredag 9-16 • Torsdag 9-15 • Lørdag 10-14
STABHOLM: 74 12 02 62 - TELEFONLINJE: 77 90 56 00 - NÅRSDØS: 74 27 05 09

SKATTELISTER INNTEKT SÅRET 2009

Navn: Alder (s 5 år):

50K



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More eco-friendly vehicles

Volvo FE Hybrid Diesel/Electric

Hybridlastebil gir enda mer miljøvennlig levering i Trondheim

AV **SIGNE STEINNES** | 28. NOVEMBER 2012 |

Posten i Trondheim har nå tatt i bruk landets første hybridlastebil. Det gjør distribusjonen i bykjernen helt CO2-fri.



November 2012

Testing biogas vehicles

Den nye hybridlastebilen distribuerer paller i sentrumskjernen ved hjelp av elektrisitet. Så snart den er ute av byen, kobles en vanlig dieselmotor inn. Her med transportleder Arve Fjærlø. Foto: Thor Nielsen

I midten av oktober fikk Posten i Trondheim overlevert landets første hybriddrevne lastebil, en Volvo FE. Lastebilen skal brukes til palledistribusjon i Trondheim sentrum. Siste tilskudd til Postens miljøvennlige bilpark gjør at Hjertepromenaden, sentrumskjernen i Trondheim, nå har CO2-fri distribusjon.

4 electric Mercedes Vito el ordered for delivery spring 2013



New mail-distribution structure in Norway post



Specially designed el-vehicle for Norway Post

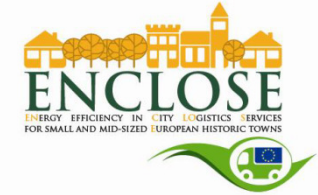
Om kort tid vil denne rulle rundt i bybildet på Østlandet. I går kveld fikk Postens nye budbil Postster Hedersprisen for god design.






Dette er fjorårets beste design

30 millioner for god design ble tildelt Postster Hedersprisen for god design.



New mail distribution structure in Trondheim municipality from March 11th



Januar 2013	Number		Mars 2013 Change
Express el-trolley	3		3 0
Piaggio Porter el	1		1 0
Goupil G3 (el)	1		1 0
Commarth (el)	10		34 + 24
Diesel van	91		43 - 48

- 594 000 km. pr. år. - 174 tonn CO2 pr. år



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Learning points

- Everyone supports positive effects on environment
 - Although there is a threshold for employees who are used to ordinary good standard cars to change to more simple vehicles like electric mopeds and trolleys
- Less access for big vans and trucks in the city centre means small vehicles
 - Truck drivers prefer trucks instead of electric vans.
- Economic support from Transnova was extremely important for the project
- There is a small selection of electric-driven vehicles and trucks
 - Electric vans and trucks are expensive
 - Small electric vehicles is cheaper than diesel/petrol cars
 - The best way for eco-friendly solutions for vans and trucks seems to be biogas
- Vehicles developed as electric vehicles seems to be less solid than cars equipped with electricity
- Study visits with representatives from management, employees and union was very useful

Eco-friendly vehicles used in Trondheim

Espresso Electric Trolley

Electric trolley for distributing mail in downtown areas. Truck pushes curbs up to 25 cm.

Speed 8 km/h and 4 km/h ahead reverse.

Load capacity is 150 kg.



Commarth Electric Jeep

El-jeep intended for execution in block buildings and downtown districts (Park and loop).

Speed up to 40 km/h. Range 50 km.

Load capacity 200 kg and 100 kg behind the front.

<http://www.comarth.com/en/>



Goupil G3 and G5

Electric cars intended for distribution of parcels.

G3:

Load capacity from 2.2 to 3.4 m³. Speed up to 40 km/h.

Range from 60 to 100 km. Charging time 8 - 10 hours

G5:

Load capacity up to 6 m³. Speed up 40 km/h electric, 70 km/h hybrid.

Range Electric 80 km, Hybrid 400 km. Charging time 8 hours.

<http://www.goupil-industrie.eu/>



Eco-friendly vehicles used in Trondheim

Iveco Daily Bi-fuel (Iveco)

Hybrid diesel – electric. Switches with switch from 30 - 90 km. pr.

Charging (recharged by diesel operation).
Speed 50 km/h. el. Load capacity 7 – 17 km³

http://www.micro-vett.it/veicoli_en.php?C=8&V=14



Volvo FE Hybrid

Volvo FE with I-SAM (Integrated Starter Alternator Motor)

Power 120 kW

7-litre diesel engine

Volvo I-Shift gearbox

<http://www.volvotrucks.com/trucks/uk-market/en-gb/aboutus/environment-new/volvohybridconcept/volvo-fe-hybrid/Pages/default.aspx>

