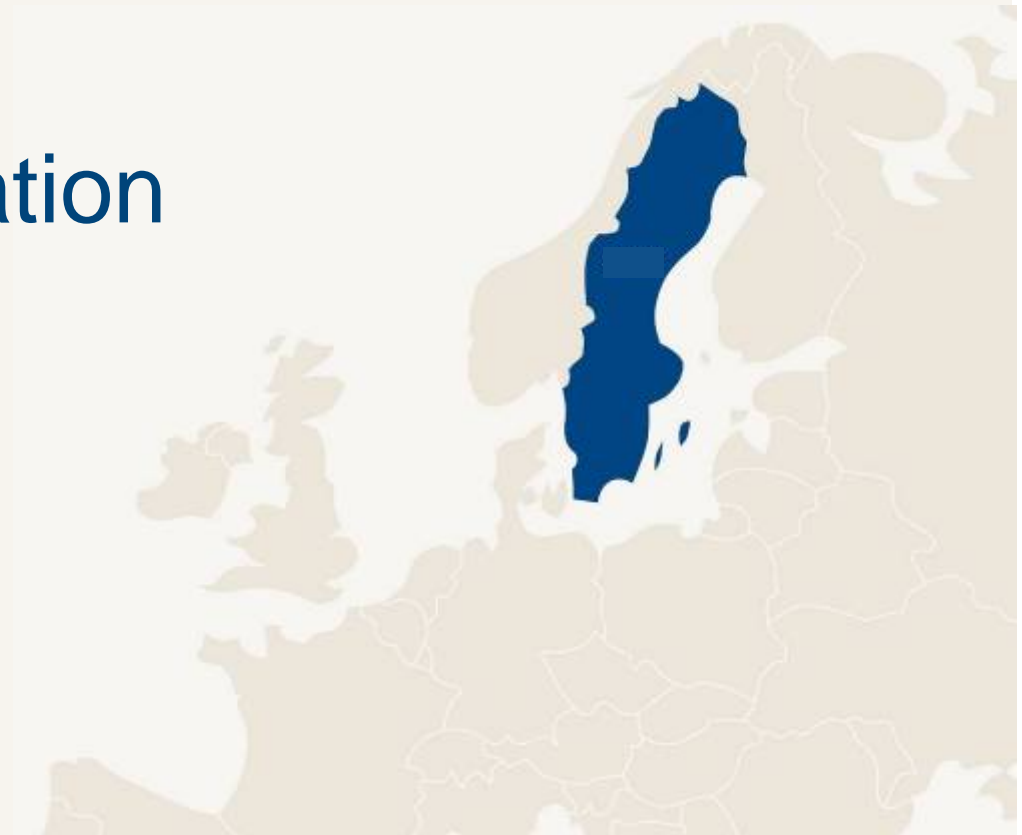


Sweden, your next datacenter location

SAFE, GREEN & COOL

Sweden as a Datacenter Location

December 2008



Sweden has world-leading prerequisites for datacenter operations

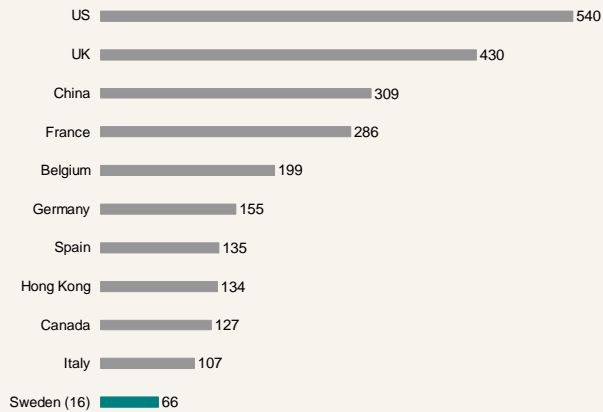
1. Stable and low electricity prices
2. Favourable climate, no natural disasters
3. Excellent communications infrastructure – best fiber infrastructure in Europe
4. Security & stability – political, economical, physical
5. Heating & Cooling system experience – minimal energy waste
6. Green Systems Thinking – economic growth with less environmental impact
7. Ample availability of IT competence, at competitive price
8. Favourable corporate, real estate and investment tax schemes
9. Cheap land prices
10. A number of available greenfield and brownfield sites, including super-safe rock shelter facilities
11. Strong willingness by local authorities to concretely support establishment process

Agenda

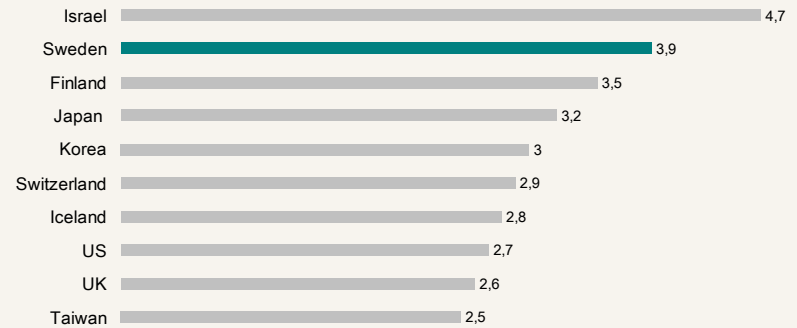
- Sweden
- Energy & Water
- Cooling/Heating & Cleantech
- Sweden ICT infrastructure
- Costs & Taxation
- Site availability

Sweden - Macro indicators

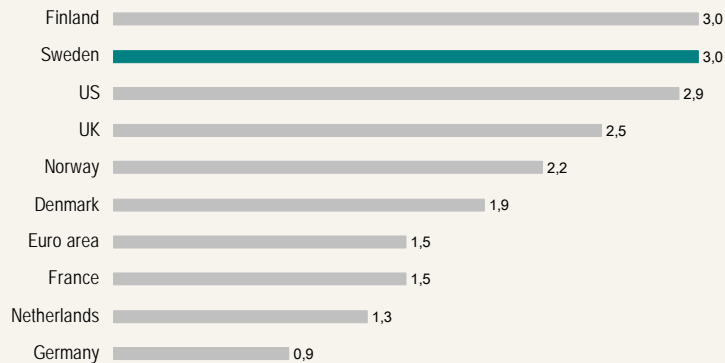
Largest recipients of FDI worldwide
2002-2006, US\$ billion



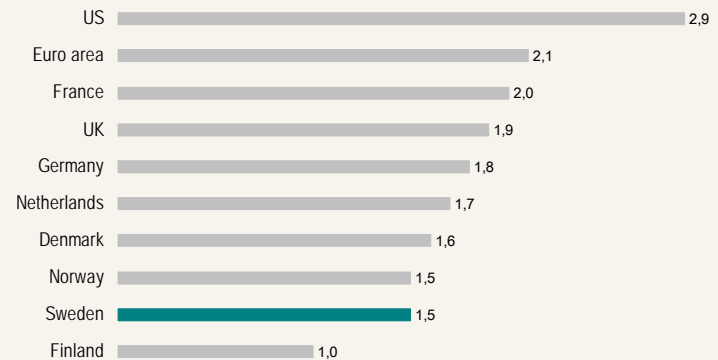
R&D expenditure
2005, percent of GDP



GDP growth in selected countries
2003-2007, average annual change, percent



Inflation rate
2003-2007, annual average, percent



Sweden – Stable & Safe

- Member of EU since 1995
- Right-Center majority government
- Few conflicts between employer and employee organizations
 - High participation in labor unions
 - Collective bargaining agreements

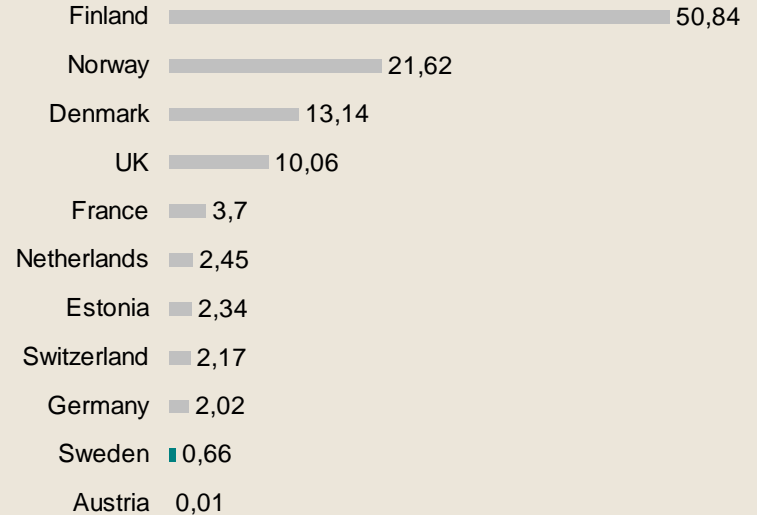
10 most stable and prosperous countries in the world

1. The Vatican State
2. Sweden
3. Luxembourg
4. Monaco
5. Gibraltar
6. San Marino
7. Liechtenstein
8. United Kingdom
9. The Netherlands
10. Ireland

Source: Jane's information services 2008

Labor Disputes

Working days lost per 1,000 inhabitants/year (2004-2006)



Source: IMD World Competitiveness report 2008

Energy & Water

Nordic electricity market

- **Totally deregulated electricity market**

- **Harmonized Electricity market exchange for the Nordic countries – Nord Pool**

- **Nord Pool is Europe's largest market place for physical and financial power contracts. Partly owned by Nasdaq OMX**

- **Energy intensive companies in Sweden**

- **10 largest paper pulp companies consume 25TWh/year**

- **Price on energy**

- **Sweden benefits from cost-effective use of hydro electric power plants with low electricity production costs**

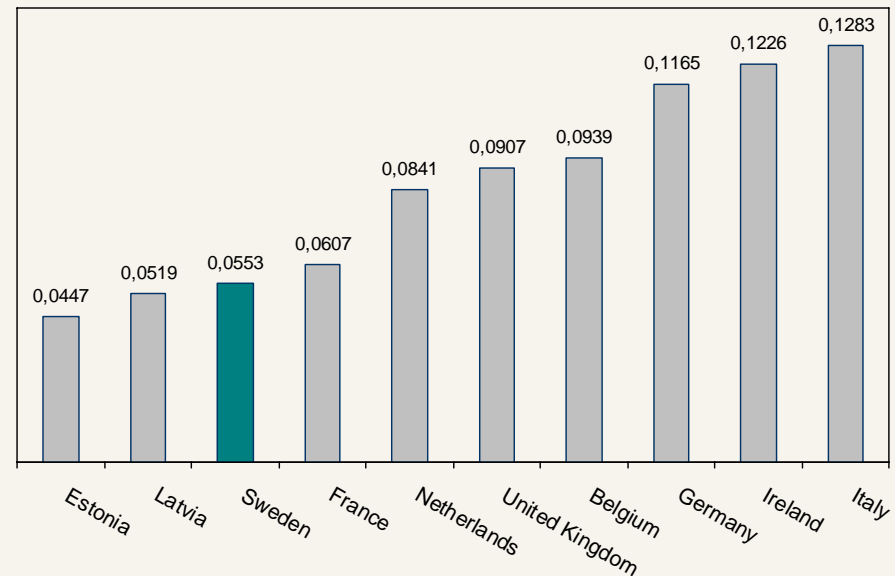
- **The electricity supply in the Nordic countries are traded on the Nordic energy exchange (Nord Pool) which creates a cost competitive environment for high intensive energy consumers and puts a pressure on the electricity producers to provide a cost effective energy production.**

Reliable, clean and cost-competitive energy

”Sweden has a successful history of providing its citizens with low-cost, reliable, secure and environment-friendly energy.” International Energy Agency 2008

- Market-driven and deregulated energy production since 1996
- High reliability – redundancy
- Low energy cost for industry

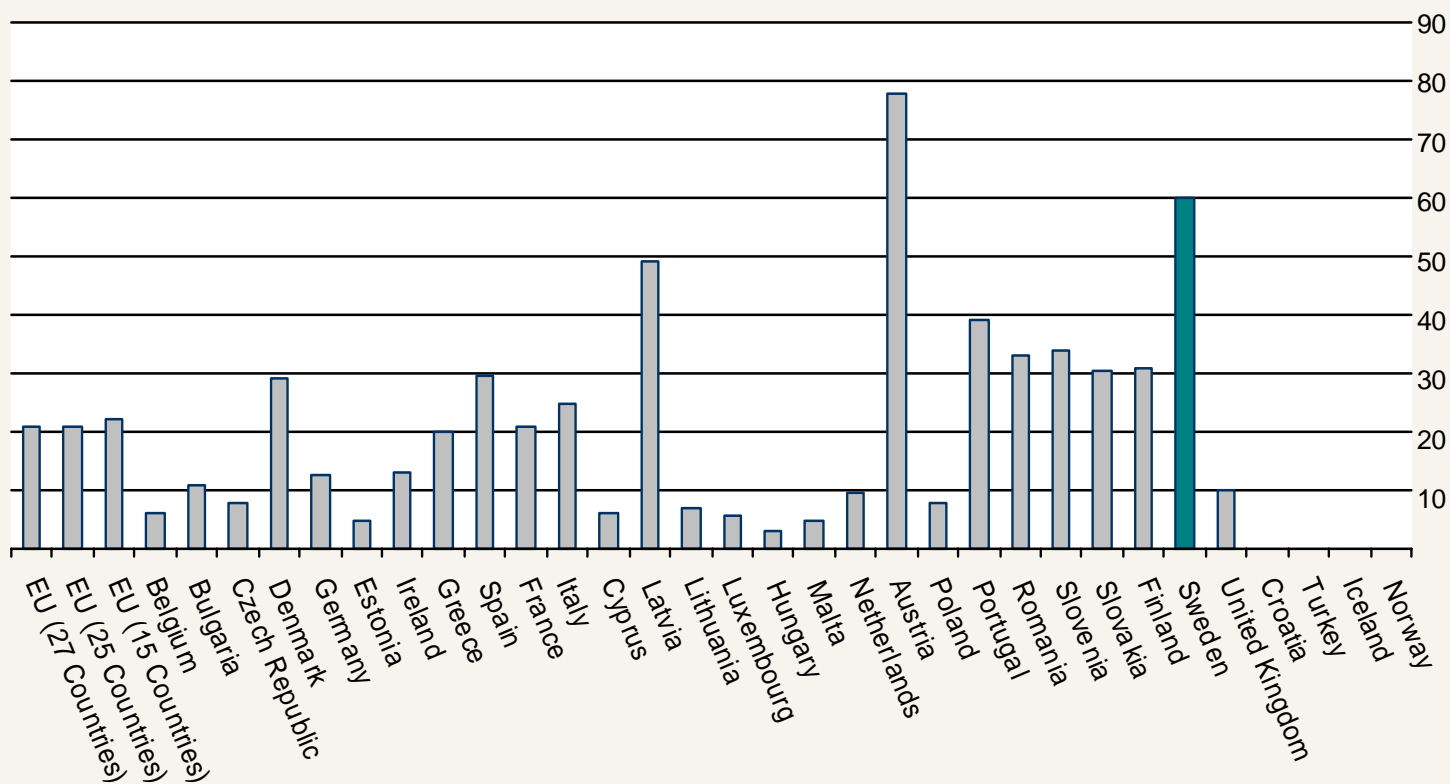
€/KWh electricity
(Large industrial users, including taxes and charges)



Source: www.energy.eu

Electricity production in 2010

60% of from renewable sources, the rest is nuclear



Source: Eurostat

Near-term Electricity Production

- Sweden will export (net) 6.9 TWh electricity in 2010

Forecast –	2007 (TWh)	2008 (TWh)	2009 (TWh)	2010 (TWh)	Change 2007-2010 (%)
Swedish Electricity production	144,9	147.9	154.4	156.2	<u>7.8</u>
Hydroelectric power	65.6	65.5	67.5	67.5	<u>2.9</u>
Nuclear power	64.3	66.4	67.6	67.6	<u>5.1</u>
Combined Heating/Power	13.2	1)	1)	17.5	<u>32.5</u>
Wind power	1.4	1)	2.5	3.4	<u>242.8</u>

1) Figures not yet finalized due to current development

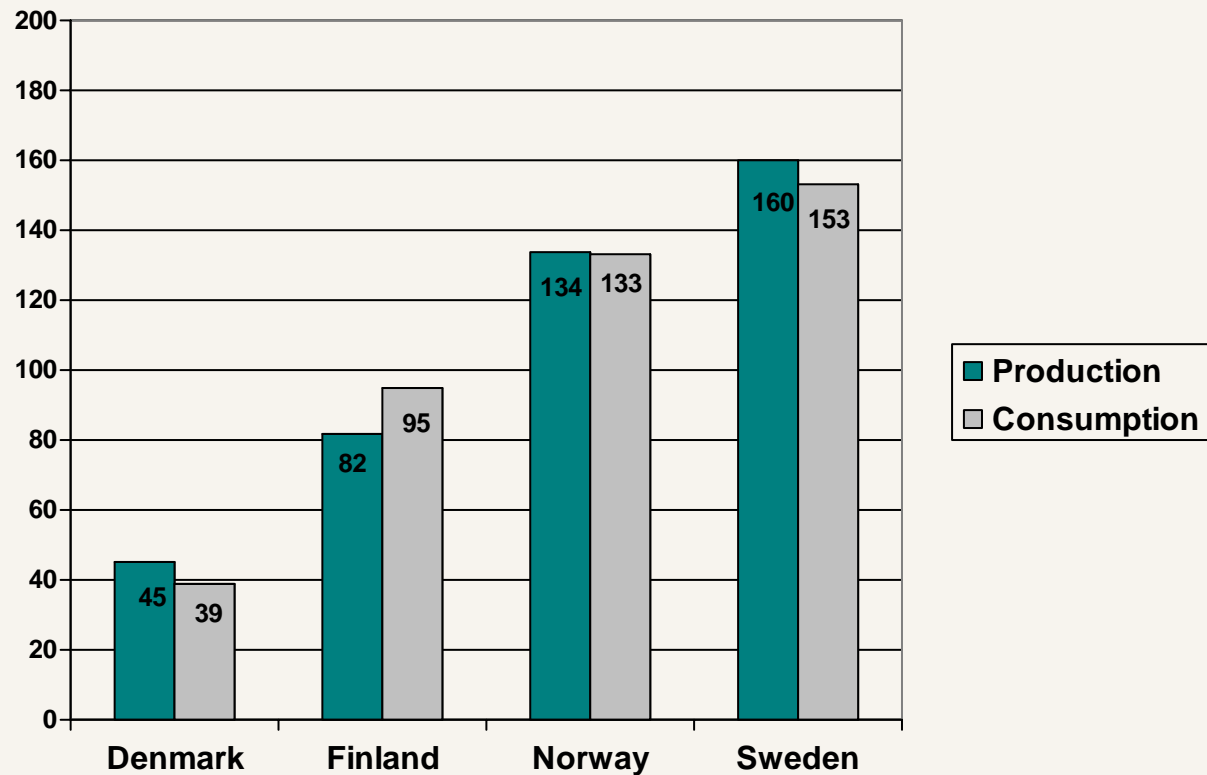
Source: Swedish Energy Agency 2008

The Swedish Energy Agency is the Swedish authority supervising net companies in accordance with electricity regulations. The agency works towards transforming the Swedish energy system into an ecological and economically sustainable system through guiding state capital towards the area of energy.

Nordic forecasted energy production

Energy balance 2011 (TWh)

Energy produced in each country excluding export/import



Source: Organization for the Nordic Transmission System Operators 2008

Nordel is the collaboration organisation of the Transmission System Operators (TSOs) of Denmark, Finland, Iceland, Norway and Sweden.

Investments in the energy sector

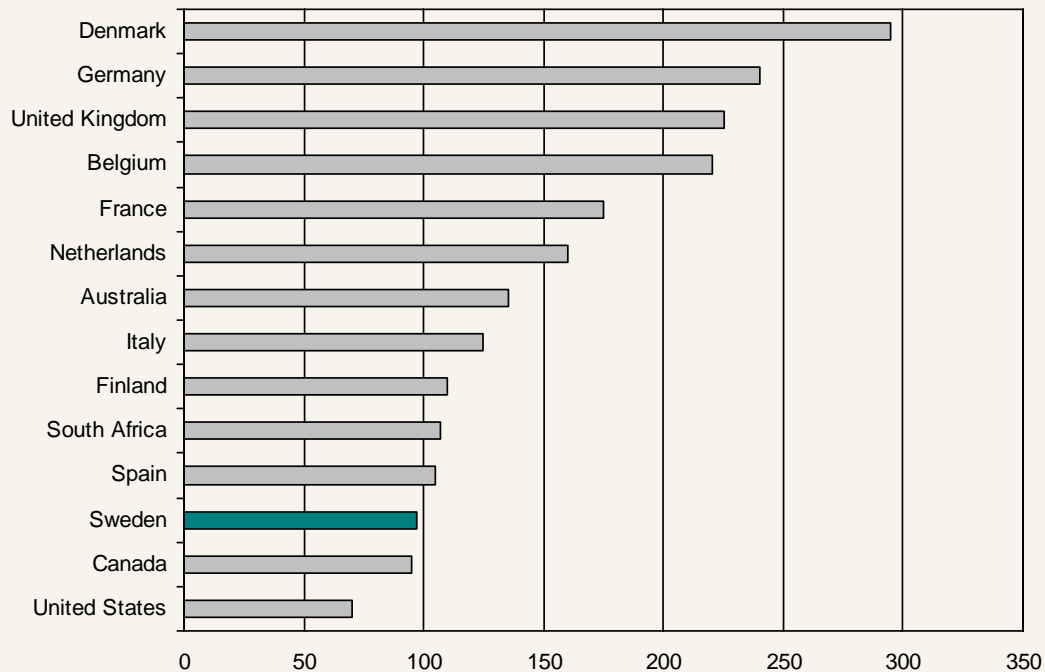
- **SEK 300 billion will be invested in the energy sector during the next coming 10 years**
 - **Investments within development of electricity production facilities amounts to SEK 200 Billion**
 - SEK 100 Billion will be invested in the development of new Wind parks
 - SEK 100 Billion will be invested in increased development of nuclear power, development of new Combined power and heating plants and investments within Hydro electric power stations
 - **Investments in the electricity grids amounts to SEK 100 billion.**
 - This includes new investments in electricity infrastructure where new power plants as well as reinforcements in existing electricity grids to ensure a stabile electricity infrastructure in Sweden
- **Investments within the Swedish energy sector amounted to SEK 34,2 Billion 2008, an increase with 300% since 1999**

Source: Swenergy.

Swedenergy is a non-profit industry organisation representing companies involved in the production, distribution and trading of electricity in Sweden – with a total of 174 member groups.

Lowest Water Cost in the EU

International Water Cost Comparison
(Cents per cubic meter, 2007)



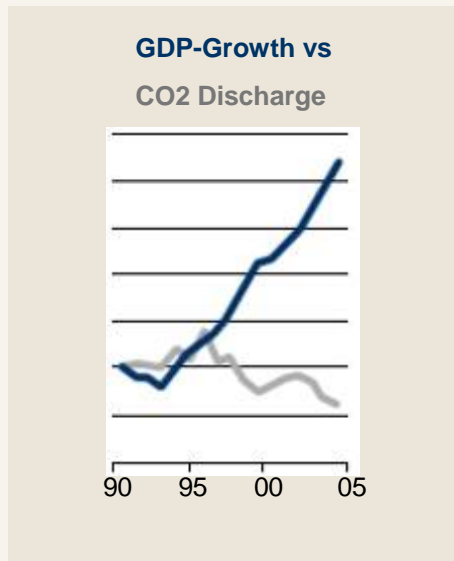
- Lakes and streams cover 9% of Sweden's total area
- Sweden has far-reaching effluent standards for treated waste water

Source: NUS Consulting Group, Global Water Report, 2008

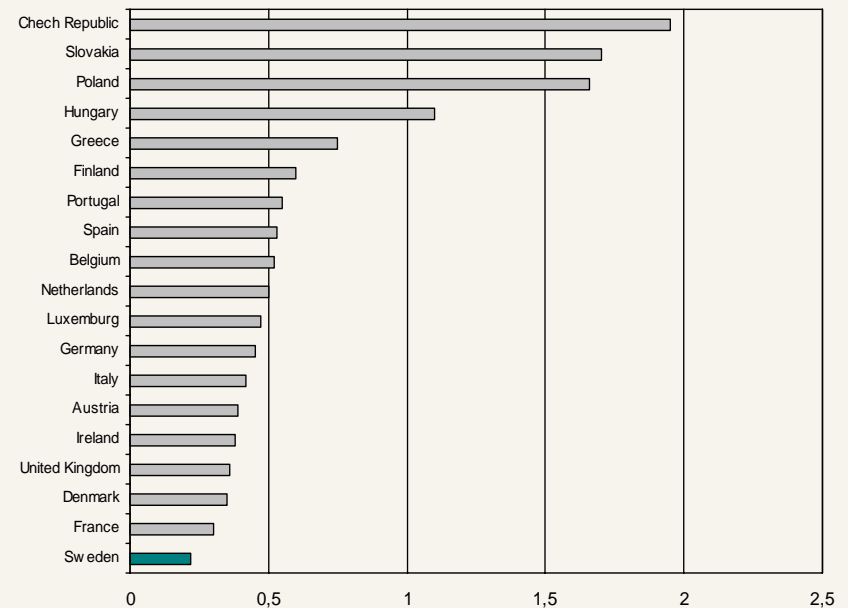
Cooling/Heating & Cleantech

Growing GDP while reducing CO₂ emissions

- Between 1990 and 2005, Sweden's GDP grew by 44% while CO₂ emissions were reduced by 9%
- Energy production has nearly doubled
- Electricity production is nearly fossil-free



Sweden has lowest CO₂ emissions in the EU



Green IT

Lower the cost, improve the corporate image

■ District cooling/heating

Can strongly increase the profitability of the project compared with the normal data center specification.

- Reduce electricity demand (-30%)
- Reduce electricity consumption (-30%)
- Reduce the need of cooling water (-100%)
- Reduce the investment in cooling equipment (-100%)
- Increase the environmental profile of the facility

■ Swedish energy from renewable sources, low carbon foot print

- Water power: 65-70 TWh/year (44%)
- Wind power is expected to produce 10 TWh year 2015
- Sweden has the toughest goals in EU on production from renewable sources, 49 % (www.swedenergy.se)
- Electricity produced from combustible renewables and waste more than doubled as did wind power, while fossil fuel use declined by over six percent (Euromonitor 2001 - 2006)

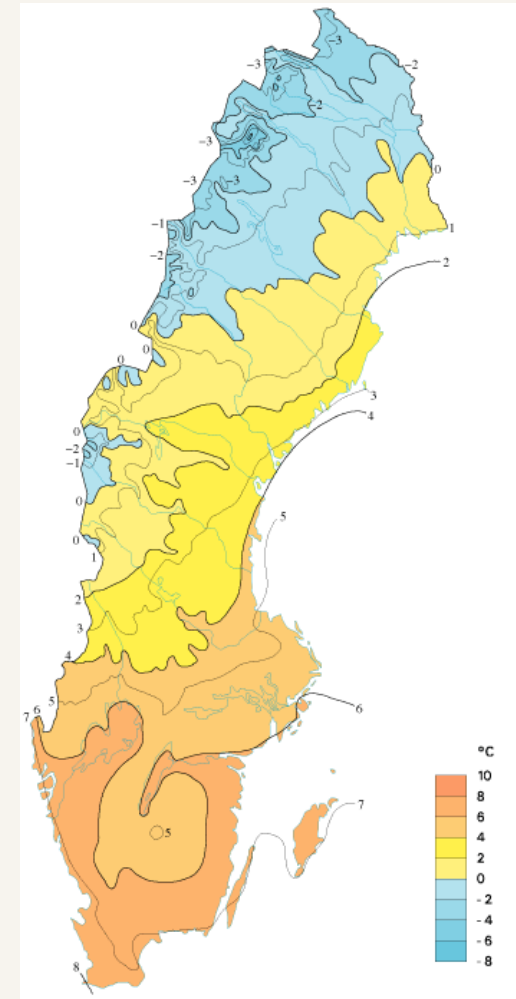
■ Water cooling

Sweden is to a large part covered by rivers and lakes. Water is readily available, reliability is very high and costs are very low from an international perspective.

Source: Fortum Energy

Alternatives for Cooling

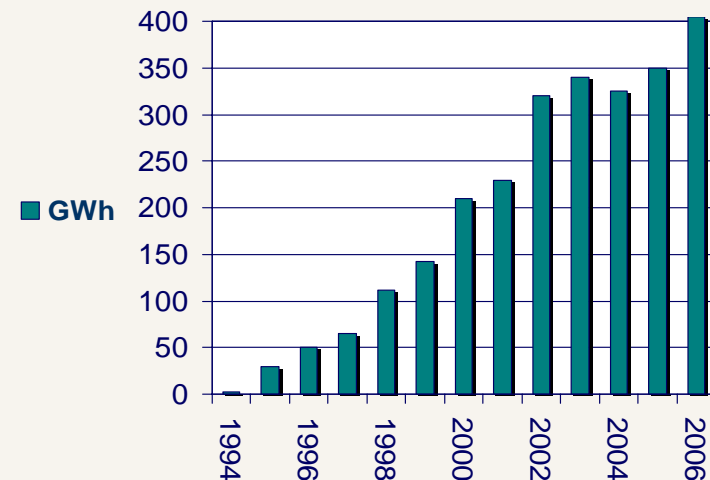
- Climate offers free cooling six months of the year (below 8°C) (Source: American Power Conversion)
 - Cheap water, reliably available year round (no droughts)
1. District cooling/heating offers lower operating costs for datacenters:
 - Reduce electricity demand (-30%)
 - Reduce electricity consumption (-30%)
 - Reduce the need of cooling water (-100%)
 - Reduce the investment in cooling equipment (-100%)
 2. River and lake based water cooling
 3. Innovative snow cooling
 4. Traditional or combined cooling solutions (Condenser cooling)



Sweden is Pioneering District Cooling

- 80% free cooling from seawater
- Since the first district cooling plant went operational in 1992, there are now 30 district cooling plants producing the cooling equivalent of 700 GWh
- Trading mechanisms for excess heat and cooling – maximum energy reused
- Stockholm has the world's largest system with 7,000,000 m² connected

District Cooling Growth in Stockholm



World Leader in District Heating

- District heating is available in 270 of Sweden's 290 municipalities, supplying around 50 TWh each year
- The transition from individual systems to large district heating plants has reduced emissions of green house gases
- 80% of the heat used in Swedish district heating networks is based on energy that would otherwise have gone to waste
- The Högdalenverket district heating plant outside Stockholm is one of the largest in Europe
 - Every year, Högdalenverket on its own takes in 500,000 tonnes of household waste and 200,000 tonnes of sorted industrial waste, which is converted to 450 GWh of electricity and 1,700 GWh of district heating for a quarter million Swedes

Sweden ICT infrastructure

ICT infrastructure

- Redundant national coverage through multiple network operators
- Total 150,000+ km of fibre optic networks
- 100 dark fibre suppliers
- 10 Swedish IXPs from North to South
- High capacity network - Stockholm has IXP with Europe's fourth highest avg. traffic with 105 Gbps
- Number of international carriers and service providers
- Leading regional operator TeliaSonera – 85% of European ISP's connected directly to TeliaSonera IP-backbone

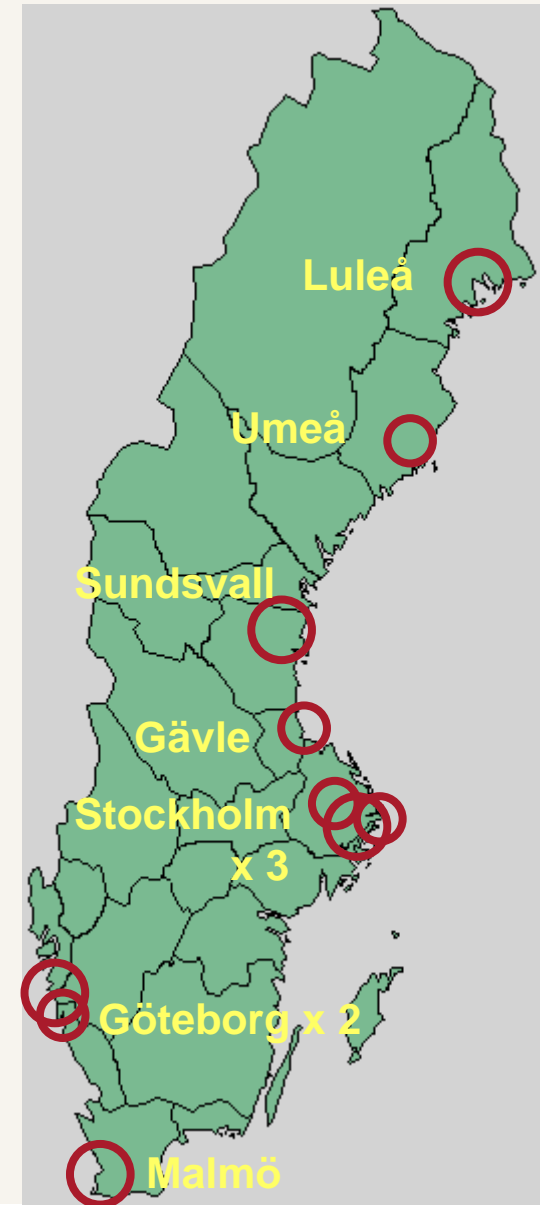


National IXP's, Sweden

- Stockholm IXP is 2nd largest in Europe in internet traffic
- Approx 50 operators connected
- Located in secure underground bunkers
- Average European IXP traffic per ISP: 0,5 Gb/s
- Average Swedish IXP traffic per ISP: 2,5 Gb/s

Future trends

- Up to 80 percent of all Internet traffic from Russia goes through cables on Swedish territory
- It is speculated that 25% of all Chinese Internet traffic will be routed westward, via Russia, and thus onto the Swedish network



National Fiber-Optic Grids in Sweden



- 8 commercial players operate national fibre-optic networks, reselling capacity & dark fiber:
 - Swedish Rail Administration
 - IP-Only
 - Svenska Kraftnät (National Electrical Grid)
 - TDC Song
 - TeliaSonera (Skanova)
 - Telenor
 - Vattenfall (energy company)
 - Dataphone

- Local municipal networks
 - account for 20-25% of the fiber infrastructure
 - Largest is STOKAB (City of Stockholm open network – 95 operators connected incl BT Ignite, Colt Telecom, Equant, Sky, Verizon, Vodafone)

Data centers in Sweden

Examples of data centers - communications

- Colt Telecom, IP-Only, TDCSong, TeliaSonera / Skanova, Telenor, Tele2

Other international operators with large points-of-presence

- Verizon, Orange, Colt Telecom, Cable & Wireless, VSNL International, Global Crossing, Equant, Tripnet

Examples of data centers - enterprise

- Nasdaq OMX and the larger international IT service companies (IBM; Logica, Fujitsu Services, HP etc.) have their own data centers in the Stockholm area as well as a number of multinationals such as Schlumberger, Mölnlycke HealthCare, Astra Zeneca, etc.

Examples of co-location companies

- Telecity, Bahnhof, Dataphone Sweden, DCS.net, DGC Solutions, Interxion, Stokab, TeleFortress

Costs & Taxation

Land pricing and real estate

- Large availability of land prepared for construction
 - Green field
 - Former military high security sites (rock shelters)
- Low cost levels (SBRD Colliers 0-300 SEK/sqm)
- Standardized procedure to buy land and properties
- Highly transparent information system on land and properties throughout Sweden
- Low real estate taxes

Taxation

■ Energy consumption tax

0.178 Swedish Kronor/KwH in certain areas of Sweden
0.27 Swedish Kronor/KwH in the rest of Sweden

■ Real estate tax

0.5% tax for commercial properties on the assessment value (75% of the estimated market value of the property)

■ Double tax treaties

Tax treaties to avoid double taxation signed with 83 countries

■ Corporate tax

Flat rate corporate tax of 28% (26.3% from Jan 2009) with large possibilities to lower the tax rate down to 23-25% due to tax allocation reserves

Extensive possibilities to further lower the effective tax rate, down to 18% on capital investments (Source: C D Howe 2007 Tax Competitiveness Report)

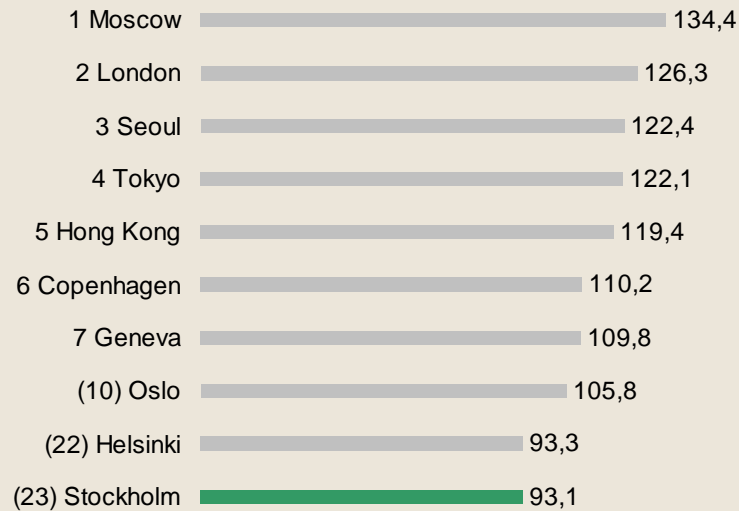
Competitive Tax Rules

- Interest fully deductible for tax purposes
- No thin capitalization rules
- No withholding taxes on interests
- No withholding taxes on dividends from unlisted shares
- No withholding taxes on royalties.
- No stamp tax or capital duties on share capital

Cost of living

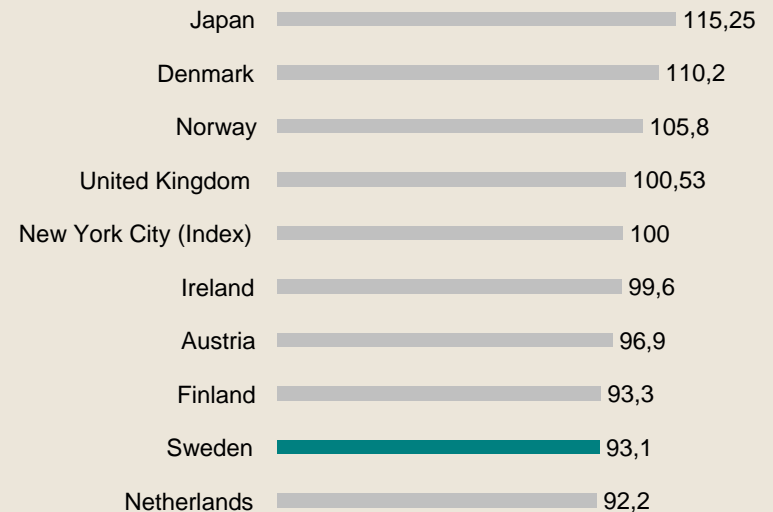
Cost-of-living index for major cities 2007, ranking and cost index (incl. housing);

New York = index 100



Source: Mercer Human Resources, 2007

Affordable cost-of-living New York = index 100



Source: IMD World Competitiveness report 2008

Available site offerings

- Information about existing sites on request
- 20 greenfield sites available with short notice, more can be generated on demand
- Datacenter facilities ready to use
- Former military rock shelters for sale, up to 25,000 sqm, some of them with connected power and fiber cable