

# **Environmental Product Declaration (EPD) - a corporate communication tool**

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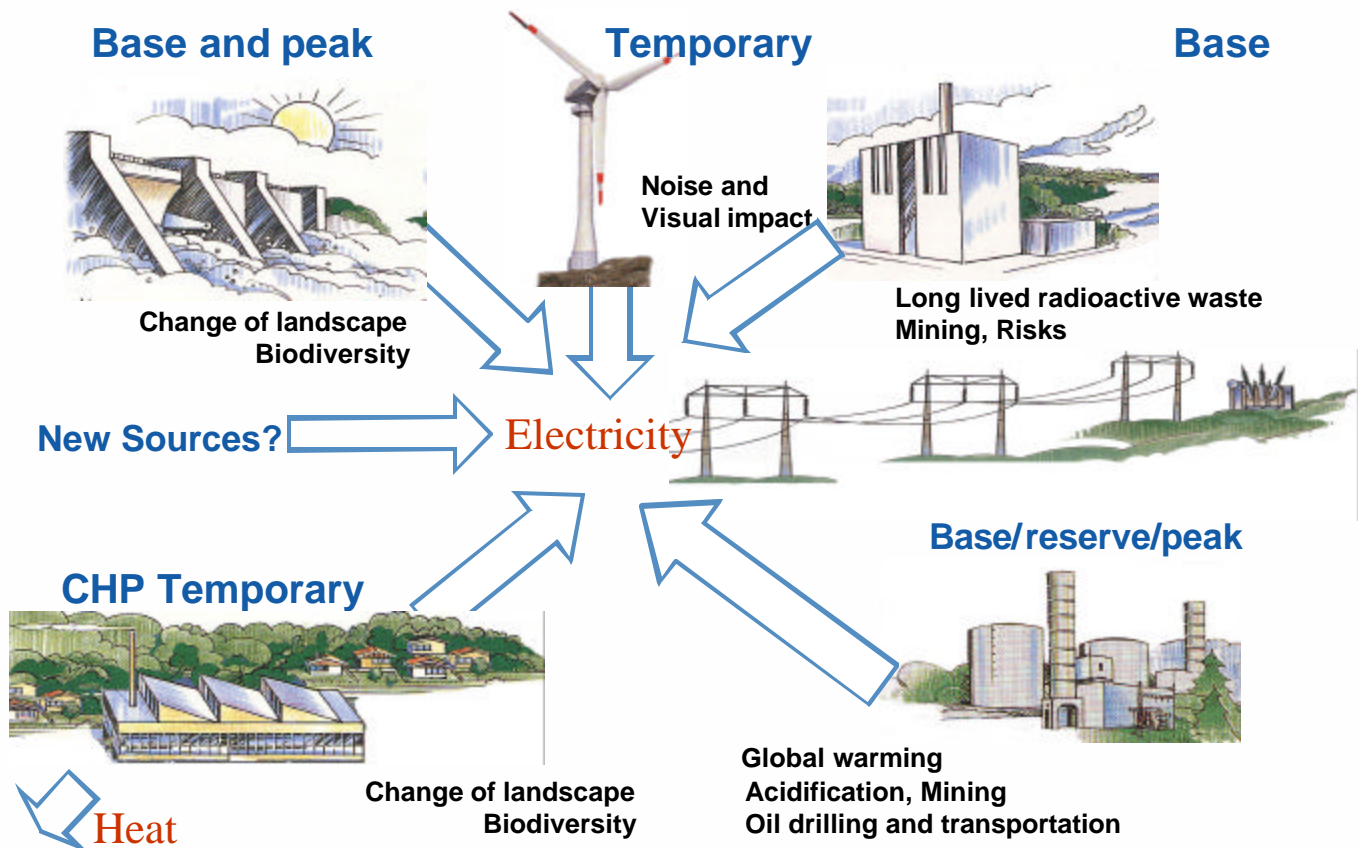
# Vattenfall AB

- One of the largest energy groups in Northern Europe
- Generator and distributor of electricity, heat etc.
- About 30 000 employees
- Electricity generation: 170 TWh per year
- 20% of the electricity generation in its market area
- 25% hydro, 35% nuclear, 40% fossil, 0,5% wind
- EMS in most units of the Group
- LCI in the Swedish part of the Group since 1993

# Why deal with LCI/LCA for electricity?

- Modern society is absolutely dependent on electricity
- In spite of this, electricity generation is questioned
- Every power-generation technology is associated with (negative) environmental impact
- Main environmental impact occurs in different phases of the life cycle for different technologies
- Environmental product information from a single step in a complex production chain can be misleading if a substantial share of overall impact arises during another step

# Electricity - a system perspective



# From LCI to EPD® - capacity building

- Early 90's: Life cycle thinking trickled into Vattenfall
- 1993: Decision to conduct LCI, the primary objective being in-house capacity building
- Primary study objects were own assets: a planned natural gas-fired plant; hydro; nuclear; biofuel; reserve power; wind; coal; fuel cell and PV
- External experts from universities and institutes were involved to give advise and to scrutinise our work
- 1996: Publication of summary report on LCA for Vattenfall's Swedish electricity generation

# From LCA to EPD® - communication

- Vattenfall was recognised for its transparent behaviour
- A simple brochure was published
- Vattenfall realised the need for harmonisation within the sector on LCI scope, calculation rules, and communication format - comparisons will be made, whether relevant or not
- Vattenfall and Sydkraft initiated methodological development within the emerging national EPD program
- PSR for preparing an EPD for electricity and heat was developed together with about 20 representatives from the energy sector
- 1999: Vattenfall's and the worlds first third-party certified EPD was published

# Business case for EPD (1)

- General: The concept of sustainable development is seen as an opportunity
- Within the company:
  - Mutual interaction with EMS
  - Helps auditors to focus on subcontractors' hotspots
  - Serves as one input for decisions on (re-)investments
  - The environmental risk assessment aids risk management, which might save cost and avoid loss of generation
  - Preparedness for coming legal requirements (e.g. Electricity Disclosure)
  - Mutual interaction with EIA

## Business case for EPD (2)

On the market:

- Strengthening of the Vattenfall brand
  - All products, also controversial ones, can have EPD
  - Third-party certification guarantees the credibility of the information
- Helps keep long-term relationships with customers expecting honesty and responsibility
- EPD is a chance to compete with something other than low price