



CCI ALSACE

The French equivalent of « Handelskammer » in Germany or Switzerland

Energy clubs in the Alsace

En partenariat avec

energivie.info
Construire, rénover, économiser
avec la Région et l'ADEME

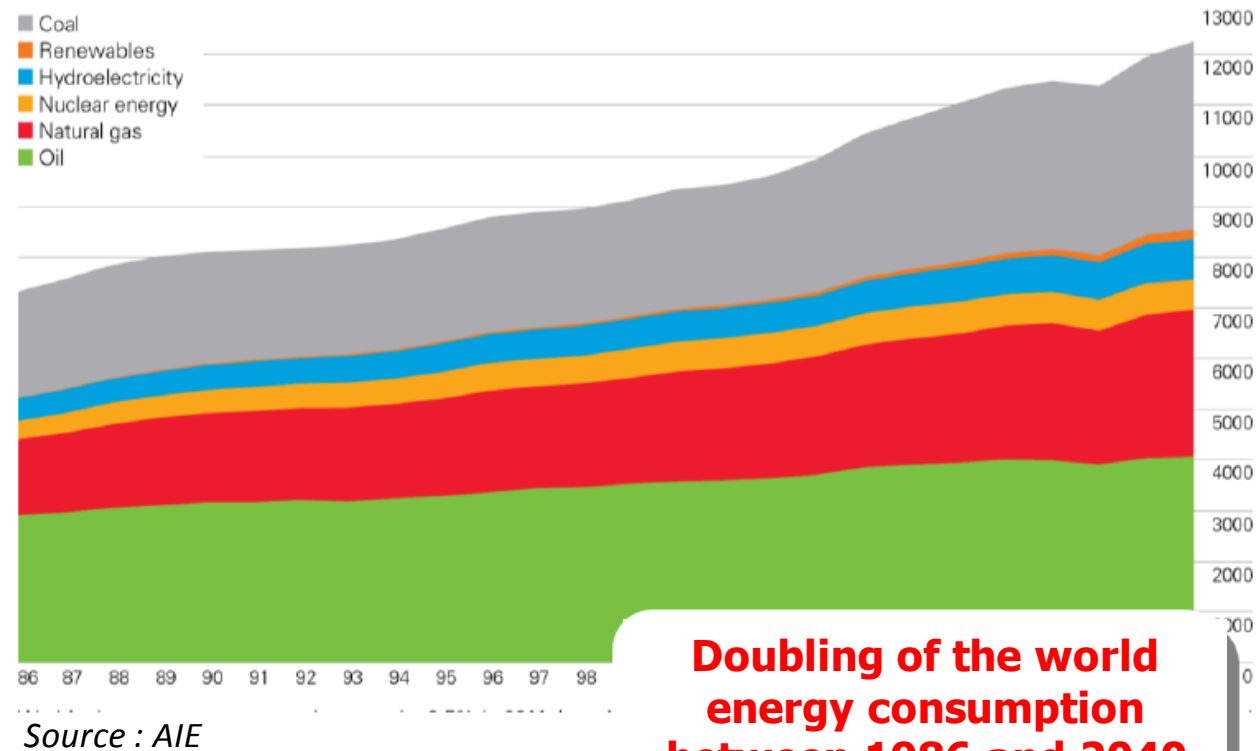


Grand Est
ALSACE CHAMPAGNE-ARDENNE LORRAINE

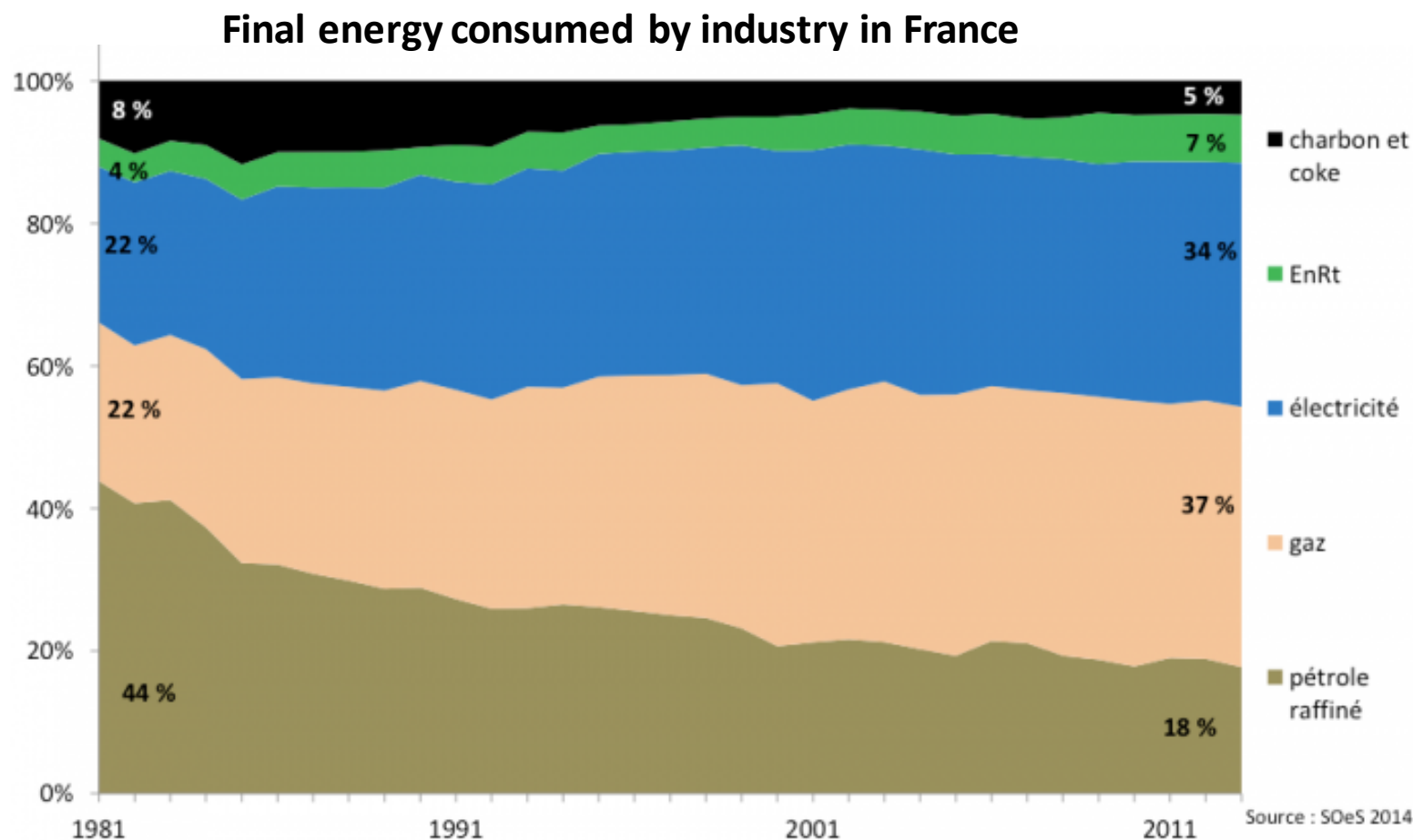
Energy challenge for companies

Energy challenge for companies

- ⚡ Massive increase of the global energy consumption essentially due to the growth of developing countries
- ⚡ High-dependence to non-renewable energies (more than 87% of the world production / mainly fossil energy sources)

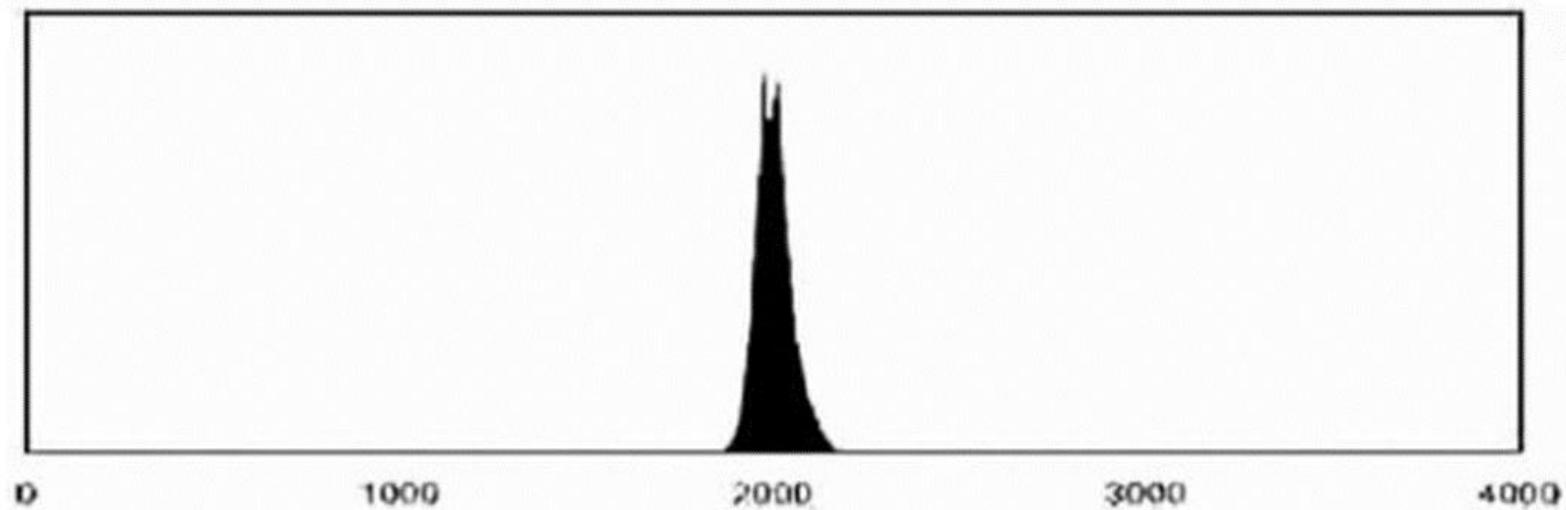


Energy challenge for companies



Industrial sector is highly dependent to fossil energy sources and also non-renewable (as electricity is mainly produced by nuclear plants)

Energy challenge for companies



Energy challenge for companies

- Energy costs can represent up to 30% of a company's operating expenses



Energy challenge for companies

Many factors affect energy price

Long-term expectations

Worldwide energy reserves

CO2–Problem

Weather forecast

Actual consumption

Peak loads

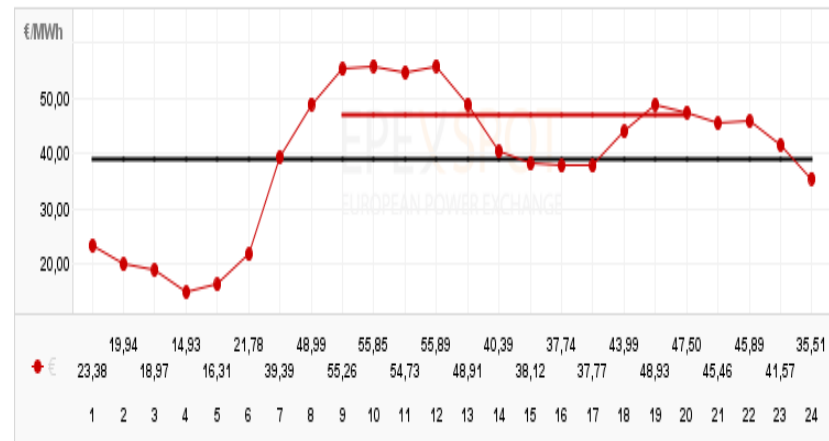
Time of day and time of year

Region

Policy

...

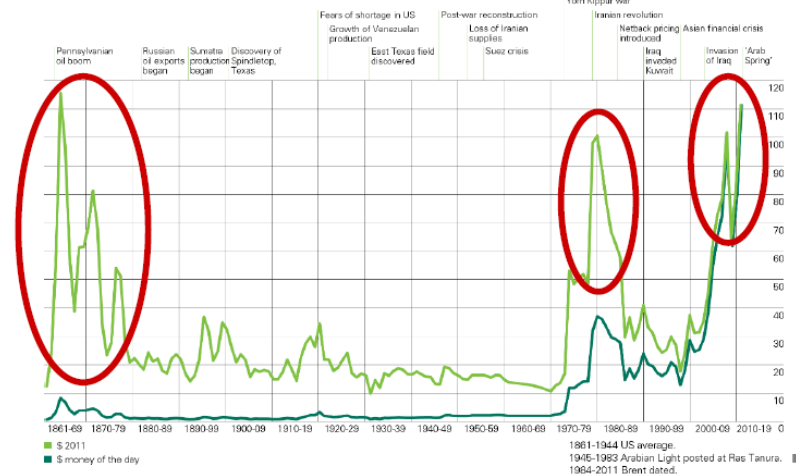
Preis



Crude oil prices 1861-2011

US dollars per barrel

World events



Energy challenge for companies

What does “Energy” means for...

A Company Manager

Costs

Purchasing strategy

Return on invest (ROI)

Regulation...

An Energy advisor

Energy savings

Environmental impact

Renewable Energies

Energy efficiency

Sustainable development

Carbon impact...

...But a same aim: reduce energy consumptions

Energy Clubs

Energy Clubs

- Since 2012, CCI of Alsace get associated with energy providers to create 4 Energy Clubs in Alsace



Energy Clubs



Endress+Hauser
People for Process Automation



Schaeffler France



- About 60 companies
- Big consumers (both gas and electricity)
- Several industrial sectors (most are not linked to energy market)
- All are interested in energy savings



LA POSTE



GAGGENAU



Union européenne

Energy Clubs

Why are companies interested in those clubs ?

- Learn to know companies of their territory
- Find solutions to reduce their energy consumption by sharing good practices (and also difficulties)
- Be aware of new technical solutions



Energy Clubs



How does it works?

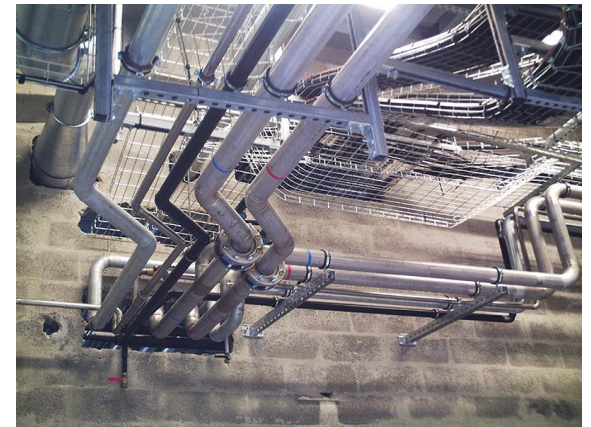
- Free of charge
- Each club meets twice a year (half-day)
- Each meeting takes place in a company which present a specific action concerning energy efficiency
- Engineering consultants are not allowed as members

Examples of good practices

Examples of good practices

Insulate it's process!

- A metallurgy company uses 5 boilers to heat thermic oil at 220°C which is then used to heat and dry the process
- Gas consumptions (per year)
 - 15,7 GWh
 - 590 K€
 - 32,5% of the total energy consumption
- Oil flows in non-insulated pipes



Examples of good practices

Insulate it's process!

- The company decided to insulate 275 valves with insulating blankets
- Benefits:
 - Reduce ambient temperature in working areas
 - Reduce risks of burns
 - Easy maintenance
 - Energy savings



Examples of good practices

Insulate it's process!

- Results

Total invest : 110 K€

Energy saving per year: 11,5% (= 68K€)

Public aids: 62,9 K€

→ ROI = 0,8 years!



Examples of good practices

Lighting retrofit!

Context

- Storage area of a chemical industry
- Lights on 24h/24h and 7d/7d
- 230 Fluorescent Tubes with ferromagnetic ballasts (old technology – 58W per tubes)
- Lifetime of the tubes: 8000 hours (8760 hours per year)
- Poor lighting quality
- **Annual energy consumption: 144 MWh**



Examples of good practices

Lighting retrofit!

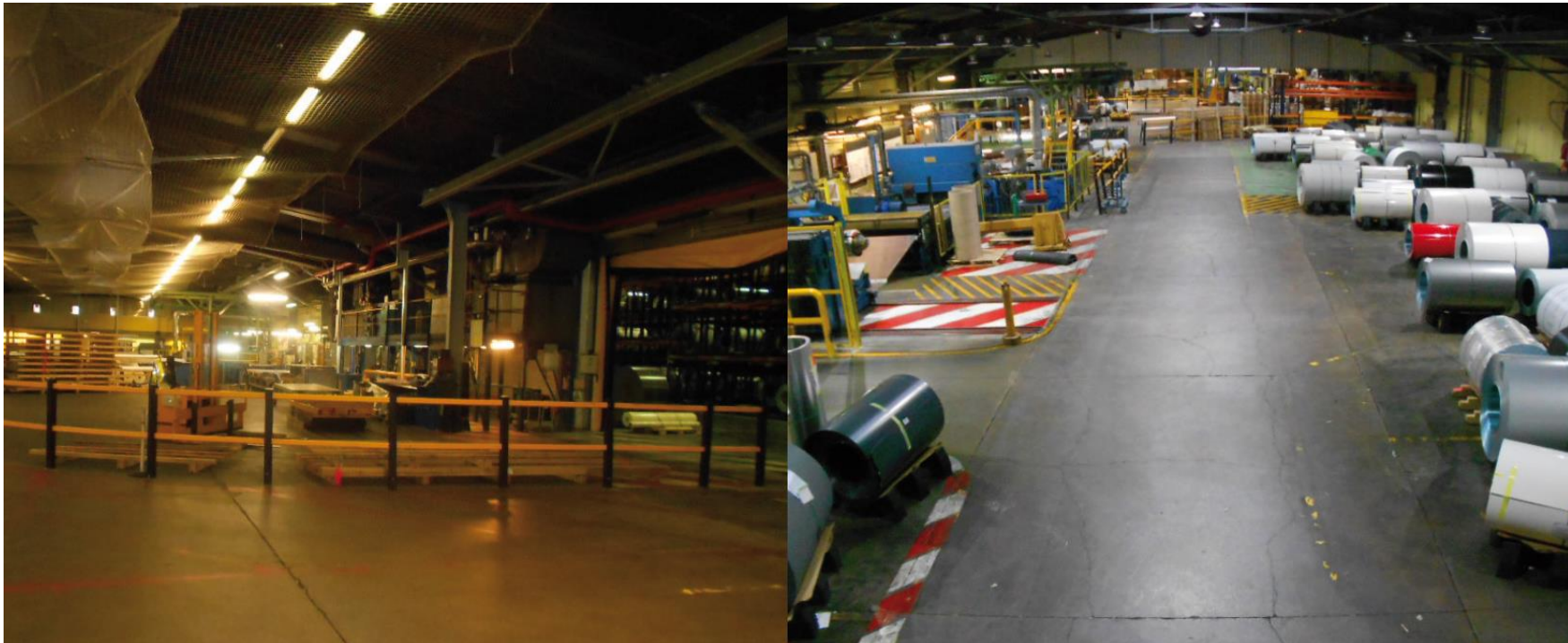
• Solution

- Replace with LED technology
- 57 LED suspensions of 100W each
- Lifetime of the LED: 50 000 hours (5 years of lighting)
- Lighting quality improved (115 Lux → 317 Lux)
- Specific command by DALI (adjust light flow relative to the presence)
- **Annual energy consumption: 54,6 MWh**



Examples of good practices

Lighting retrofit!



Examples of good practices

Lighting retrofit!

- Results

Total invest : 36 K€

Energy saving per year: 62 % (= 9 K€)

Public aids: 0 K€

→ ROI = 3,2 years
(taking account of the maintenance costs)



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