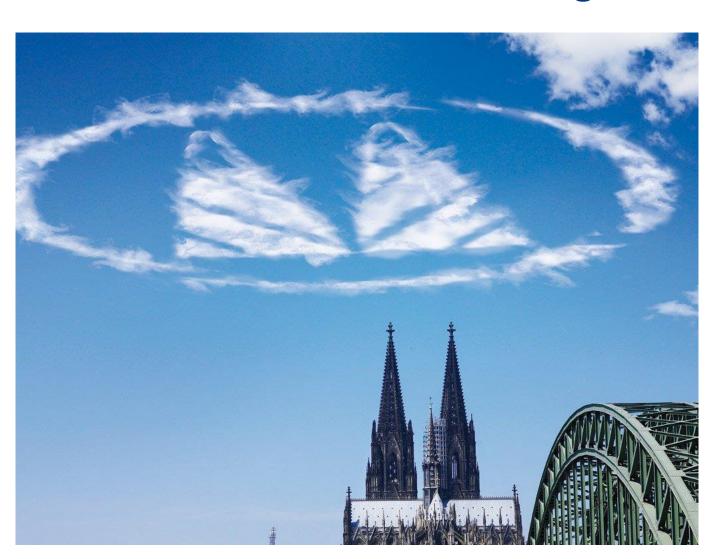


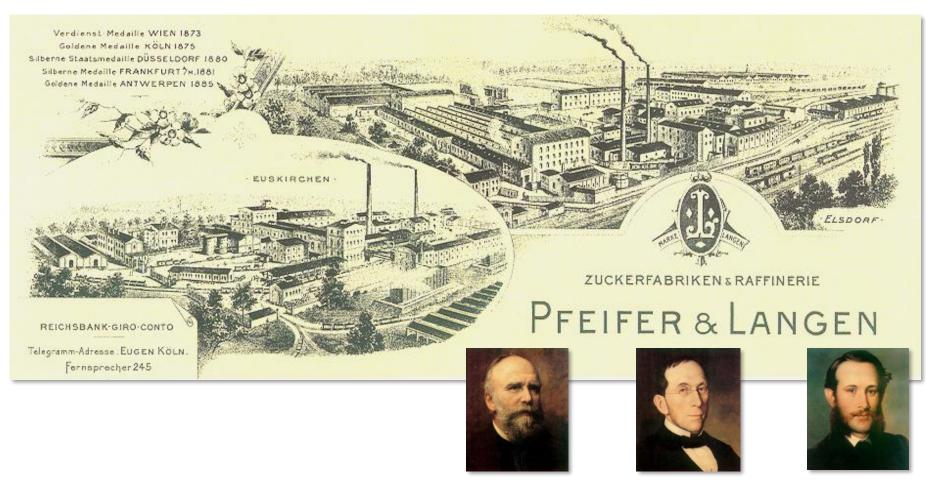


Welcome to Cologne





Pfeifer & Langen History Independent and family owned for over 145 years



Eugen Langen 1833 – 1895

Emil Pfeifer 1806 – 1889

Valentin Pfeifer 1837 – 1909

11/12/2018 Pfeifer & Langen 2017



Pfeifer & Langen A family owned company



Pfeifer & Langen's legal status is a limited partnership. It is managed by personally liable partners.

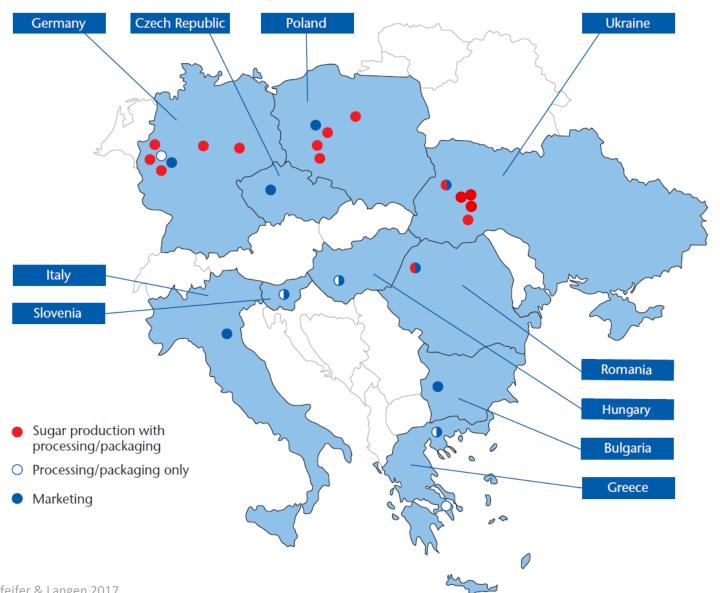
This structure reflects our particular strength, philosophy and tradition:

to maintain and strengthen our position in the European market for sweeteners as an independently acting company.

11/12/2018 Pfeifer & Langen 2017 3



Pfeifer & Langen – Sugar Group



11/12/2018 Pfeifer & Langen 2017



P&L Key Figures

Production: 2.000.000 t/a sugar

1.500.000 t/a feed

Clients: 1.500 industrial clients

60.000.000 consumers (direct/undirect)

Energy: 10.000.000 t/a water evaporation

3.000.000 MWh fuel consumption

(15% electrical)

Emissions: $1.300.000 \text{ tCO}_2/\text{a}$



The Process

CO₂ Emission

- 1. CHP
- 2. Dryer
- 3. Limekiln
- 4. Waste water





CO2 Allowances and prices (met for P&L) since starting the business

CO₂ - Emissions since 1990 (Kyoto) - 100% to 48% (2017)

Free allocation: 1. Period 110%

2. Period 95%

3. Period 45%

4. Period 25% (expected)

Prices (dealed with) 3€/t to 28€/t

Fines (not met but as a rule) up to 100€/t (in case of uncorrectness)

Correct and sustainable reports make sense!



Me in 2004?

Was vermisst der Anwender?

Persönliche Startseite, mit für ihn wichtigen Informationen Alles auf einen Blick

Vorlagen

Mobile Zugriffe

Definierte Verteilerkreise

Strukturierte Ablage

Feedback über seine Inhalte

Interaktion mit anderen Systemen



Mehr
Informationen
zum
Unternehmen

Steckbrief der
Werke

Glossar
Zuckerfachbegriff
e

Bilder
Videos

Mehrsprachigkeit



Technical Reporting 2004 Basics and historical situation

Target: one true report for the company

Purchasing (Fuel supply)

SAP

Quality Dpt (emissionfactor, heatcapacity)

Excel, Word

controlling (financial reports)

SAP

Production (consumption, emissions)

Excel, PLC, MIS

Purchasing (stocktaking)

paper?/SAP?

Board (strategy, planning)

Trading team

reporter

supplier

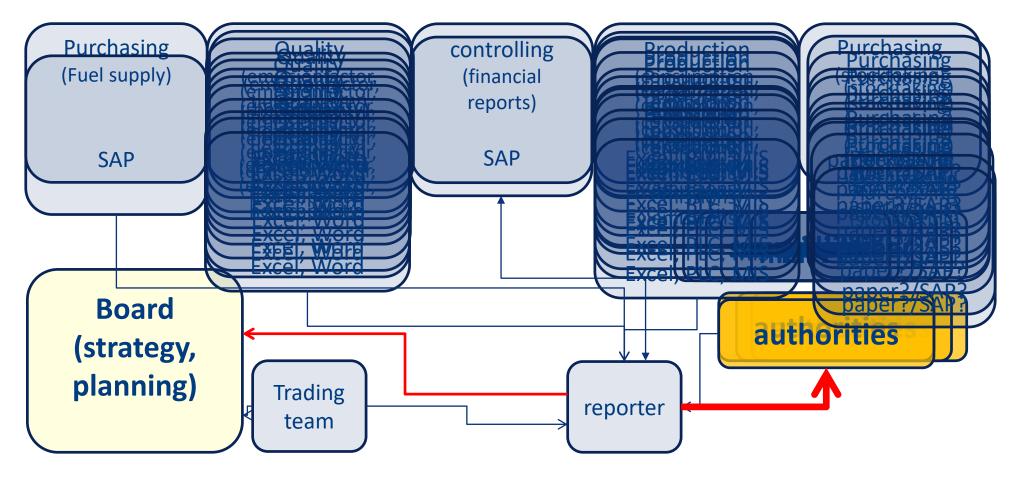
authorities

9



Technical Reporting 2004 Basics and historical situation

In fact: one true report for the company?





The solution:

three steps from "simple reporting" to a "business process"

1. Define a sustainable parole: our case

"every fuel delivered plus the stock difference causes emissions"

2. Define the rules of the game

Purchasing / Controlling

(incl. documentition for quantity, quality, emissionfactor, validation of the laboratories, the weighers, complaints, SAP documentation of the deliveries and consumption) **Controlling**

Stockintake per 31.12.xx

Reporting (15d/a)

Sustainability check, site visits, strategy proposals, board and authorities information

3. Choose the instruments:

our case - SAP/ Siemens MIS



It takes 2min to be informed

Energiebericht Pfeifer & Langen - Grundproduktion Kalenderjahr Datum: von: 01.01.17 bis: 31.12.17 aus DicksaftAblauf Tage aus Rüben 555 Tage Status: Wert aus Werk Masse Reine Rüben verarbeitet 6.655.745 Zuckererzeugung gesamt 1.372.412 tWW Zuckererzeugung kristallin 1.072.405 RZ-Kläre zum Flüssigzucker 30.533 tWW Verkauf Dicksaft / A-Ablauf tWW 9.514 Erzeugung Fertigware 1.112.452 tWW Masse spezifische Werte ME Energie Heizwert Kessel MWh kWHME kWh/tRb kWhłtWW kWhłtWW B-Kohlenbrikett 160,195 879,198 5.488 132,10 640,62 790,32 3,48 20,81 Steinkohle 2.588 t 23,151 Heizöl S Kessel t 11.833 0,47 Heizöl EL Kessel 44 t 0,08 0,38 9.591 64,30 311,82 384,69 Erdgas 44.621 TNm³ 427,949 Biogas 3.335 TNm³ 18.344 2,76 13,37 16,49 Kalksteinmehl 1.694 1.349.161 MWh 202,71 983,06 1212,78 Kessel (gesamt) 11.833 0,81 4,86 457 5.410 Heizöl EL für Heizung 4.633 9.584 0,70 3,38 4,16 Gas für Heizung 483 TNm³ Heizung (gesamt) 10.042 MWh 1,51 7,32 9,03



Enjoy Your stay in Cologne – support the local economy!



For further discussion.





Matthias Brendel
Senior consultant

mailto: Ecoconsv@gmx.de

Phone: +359 55454792