

INDUSTRIAL EFFICIENCY 2020 DECARBONISE INDUSTRY! GOTHENBU 14-16 SEP

What the industry needs from Energy Efficiency: Reflections on energy efficiency programs in food & beverage sector

ADAM PAWELAS

FORMER HEAD OF SUSTAINABILITY IN SUPPLY CHAIN, CARLSBERG SUPPLY COMPANY AG, SWITZERLAND

Content

About the Author

This is what we want from energy efficiency

Factors of success or failure

A few examples

Energy Efficiency: these are the needs

- Top position in value hierarchy of energy and CO2 reduction interventions (energy transition)
- Improving bottom line of organisations
- Funding the energy transition journey
- Improving sustainable image of consumer-facing companies and aiding employer branding
- Peer pressure activates more companies to join the efforts
- Public committments and pledges (,pledge pressure')
- Regulatory schemes on energy efficiency (national and regional)

When the needs are wrongly addressed: success factors of energy efficiency efforts



Factor 1: Lasting Commitment

Genuine commitment and involvement of top management Energy efficiency focused not merely on quick savings, but on a deeper purpose, with attention to deeper understanding of improvement levers and opportunities

Energy efficiency targets are made in combined top-down and bottom-up inputs Top management fosters team collaboration and across functions (operations, engineering, capex, procurement, planning, controlling)

Factor 2: Sufficient Resourcing

Resources fit the objectives and scale of the programme Attention and effort is given understand the skill gap, to people development and recruitment, or external support

Necessary capital or external financing is provided with clear project acceptance criteria

Factor 3: Smart Prioritisation

A wide-range all-at-once action programme bears a risk of distraction, dissipation of efforts, and temptation to jump to next action when discouraged by previous defeat

> Once action is done and effect confirmed the organisation should move on to next areas

Organisation builds clear plans and makes conscious choices on the sequence and focus, combined with resourcing and capabilities

Factor 4: Sustaining

Improvements should not be 'eaten out' by persistent or growing defects in operational control and maintenance

> Improvements should not diminished by lacking change management or not effective corrective action

Factor 5: Meaningful Measuring

Design energy monitoring fit for purpose and use the best practical units of measurement (e.g. per unit of product, per volume or value, per process, absolute or relative figures, etc.)

Meter data must be sufficient, structured and converted into meaningful information to build accountability, to track performance and understand the changes as well impacts of projects

Communicate data with all relevant stakeholders on different levels (with the information that is meaningful to them!)

Factor 6: Continual Adaptation

Avoid falling into selfcomplacency climax of energy performance, control the onset of culture of finding excuses rather than new opportunities

Challenge brand-new sites with a perception of the efficiency job done by design, adjustments of design to real operating conditions still can be done

Avoid easy accepting projects with energy impact because we 'earned' it with previous savings

Example: Focus on best practice sharing and linking to performance

Good Utilities Management is PERFORMANCE MANAGEMENT & PROBLEM SOLVING





Group Carlsberg External Use: No KPI b Valid for: Carlsberg Breweries Doc. ID: CBDOC-1070-10815 Approved by: Firsanov, Roman cost a Group Version: . . . 1.0 Monit 25 site/(Utility Performance Proble Heat Consumption [kWh/hl] 12 10 actior Target Setting Content MT-01 Metering and Data Collection ... MT-02 Heat Monitoring & Analysis MT-03 Water Monitoring & Analysis.... Specific MT-04 Electricity Monitoring & Analysi MT-05 Refrigeration Monitoring & Ana 5 MT-06 Compressed Air Monitoring & A MT-07 CO2 Monitoring & Analysis...... MT-08 Wastewater monitoring & Analy 0 MT-09 Target Setting, Benchmarking a 20 30 50 70 40 60 80 90 MT-10 Performance Management Syst COM Utilities score [%] References.....

What Support is Needed by Industry for Sustained Impact of Energy Efficiency?

Support is needed to address any of success-or-failure factors in Energy Efficiency programmes

Specifically:

Education on energy management and best available techniques, unbiased, not sales pitch presentation of methodologies and solutions

Communication and industry collaboration, including sectoral guidance and sharing platforms of best available techniques, solution providers.

Incentive schemes for financing and technology adoption, for both generic well-proven techniques as well as pilot projects.

Direct knowledge transfer to smaller companies and support to less mature markets

Example: Public Authorities Supporting Industry in Energy Efficiency. Case of Upper Austria Energy Agency

Upper Austria's strategy Carrots, sticks and tambourines - and innovation!



Sticks: Local legislation, stricter standards, time-based bans

Carrots: financing, consultation and project support

Tambourines: knowledge sharing and campaigning

Innovation: pilot and demo schemes



THANK YOU

Questions?