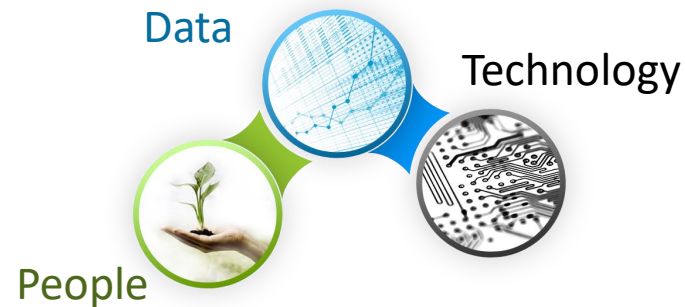


QUEST

A thoroughly practical, proven approach to
Energy Management



Arne Springorum

HE Consulting s.r.o.

HE Consulting @ Očekávaný vývoj leteckého
průmyslu 4 December 2018

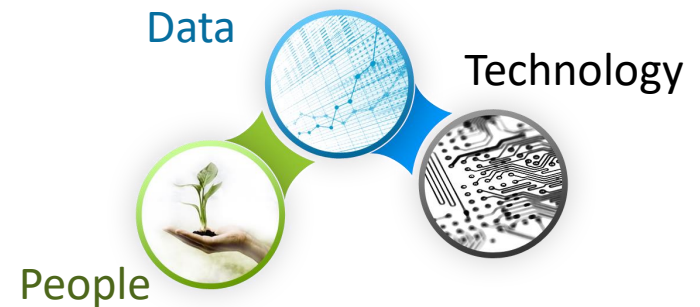
Today`s Presentation

Let`s start a conversation

Introducing the concept of QUEST

Some practical examples from SKODA AUTO

Give you some ideas to take home from Brno



Maybe not for everybody?

Wide range of organizations here

What we all have in common:

- Deliver improvements in our operations
- Do more with less

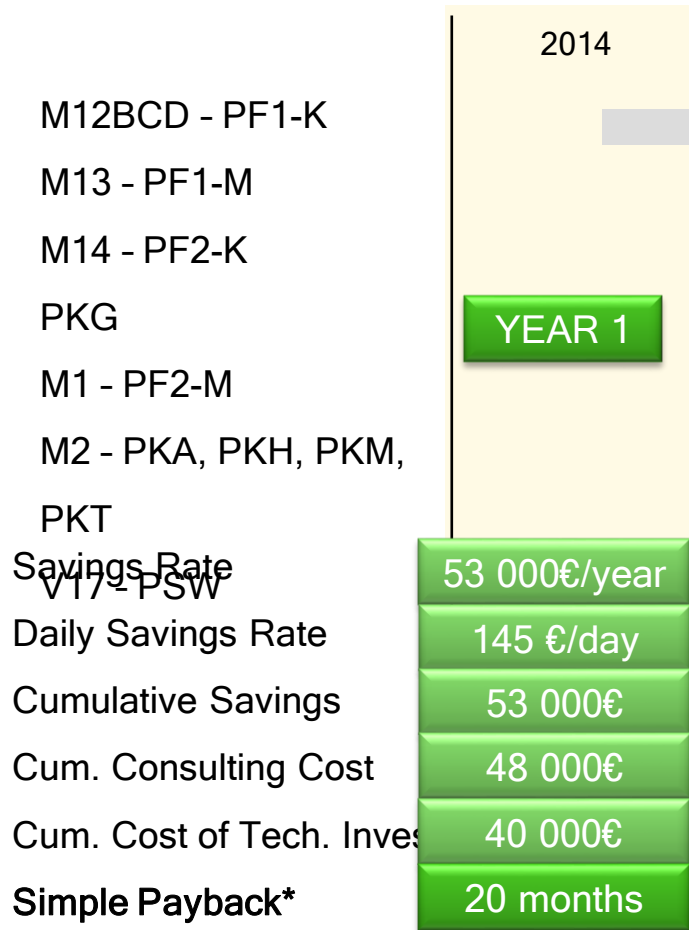
We will draw on real practical experience from the shopfloor

- Approach applicable to some today
- For others something to keep in mind for a future time

So what does this approach offer?

5 years QUEST Program for Energy Savings

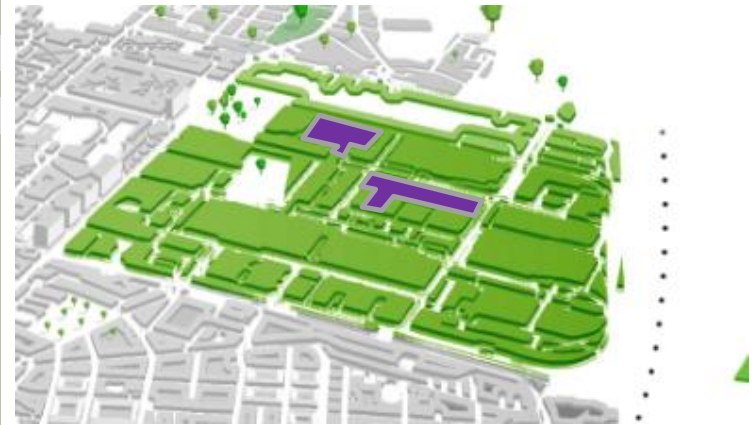
The underlying Facts: Timeline and Financial Results



5 years QUEST Program for Energy Savings

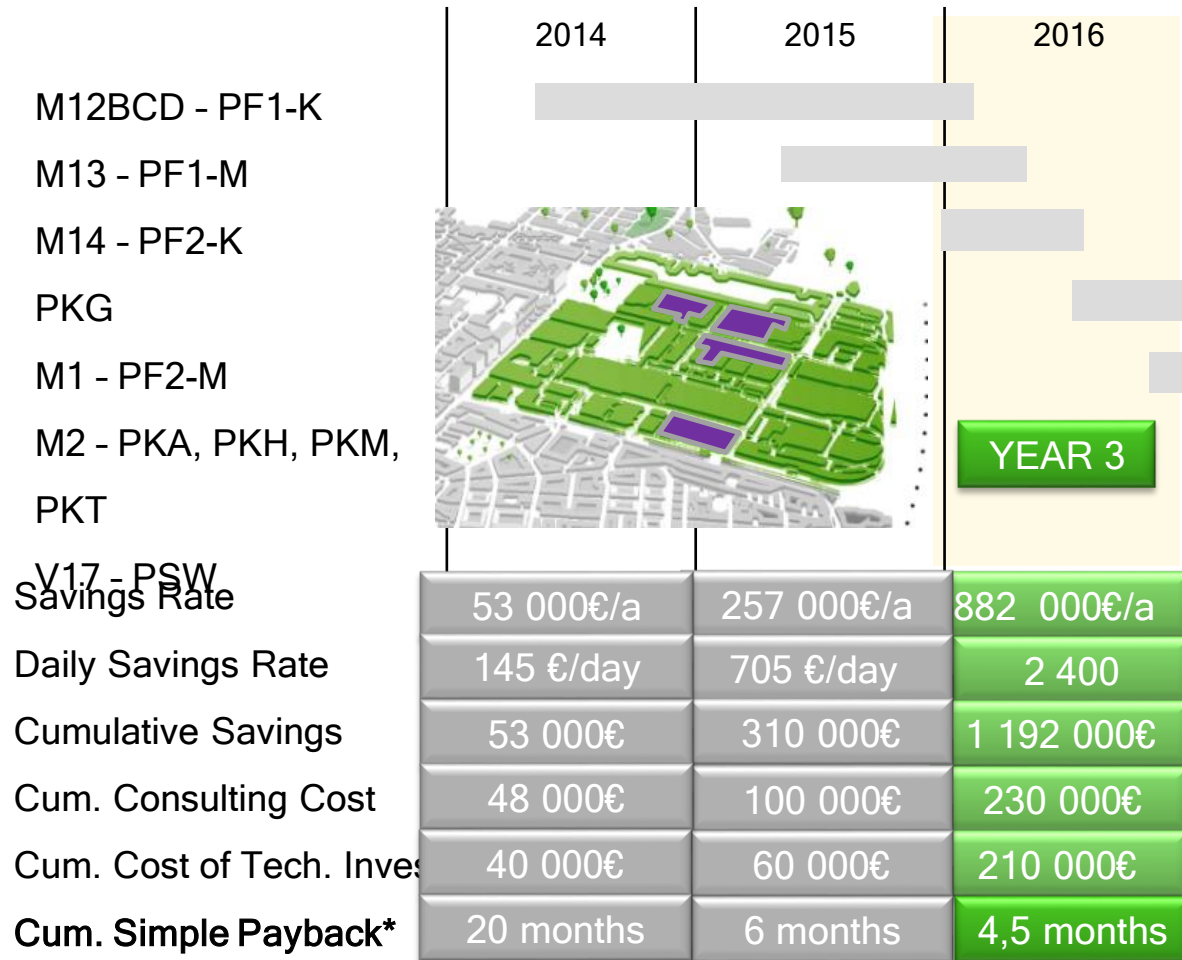
The underlying Facts: Timeline and Financial Results

	2014	2015
M12BCD - PF1-K		
M13 - PF1-M		
M14 - PF2-K		
PKG		
M1 - PF2-M		
M2 - PKA, PKH, PKM,		
PKT		
Savings Rate	53 000€/year	257 000€/year
V17 - PSW		
Daily Savings Rate	145 €/day	703 €/day
Cumulative Savings	53 000€	310 000€
Cum. Consulting Cost	48 000€	100 000€
Cum. Cost of Tech. Invest.	40 000€	60 000€
Cum. Simple Payback*	20 months	6 months



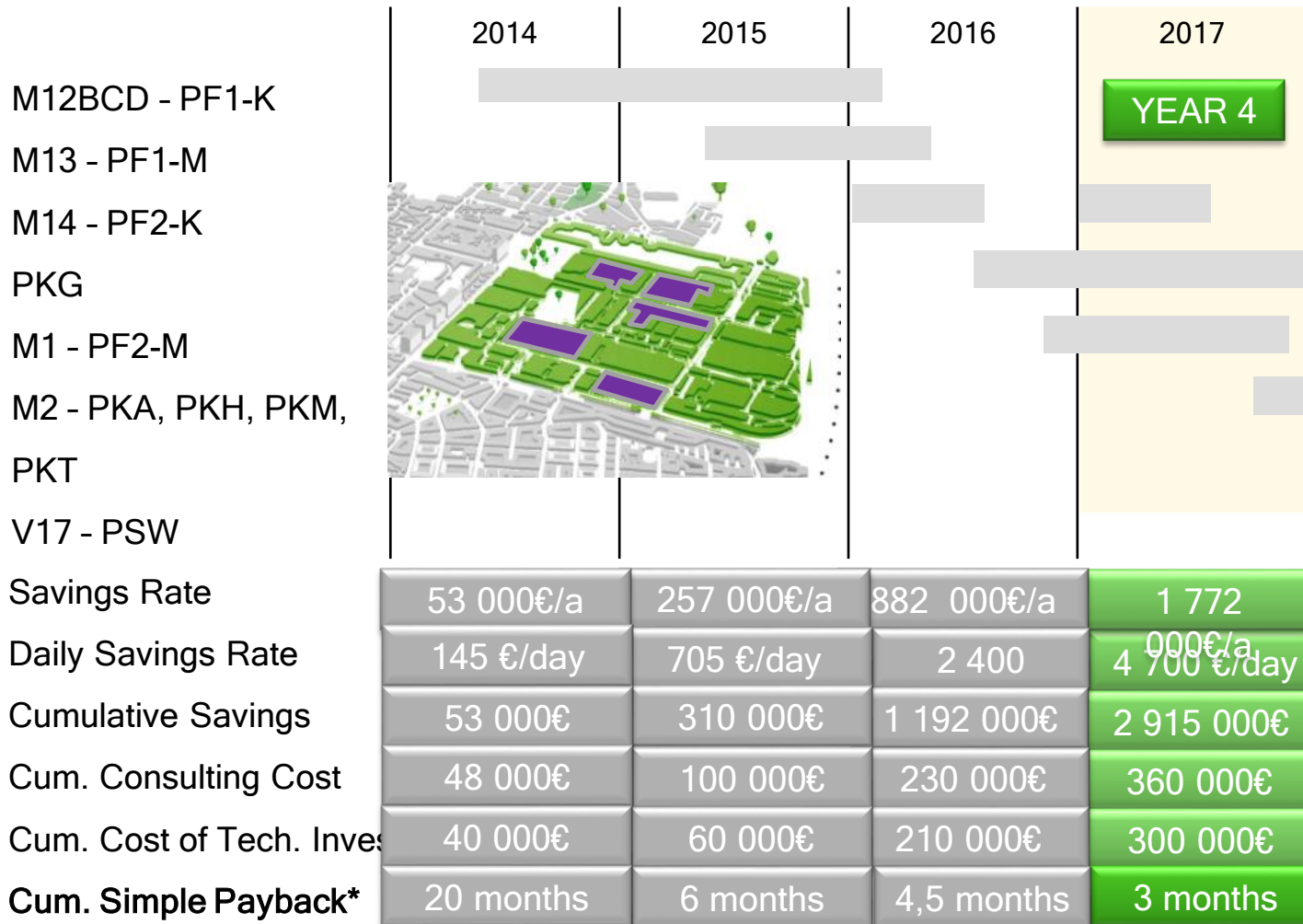
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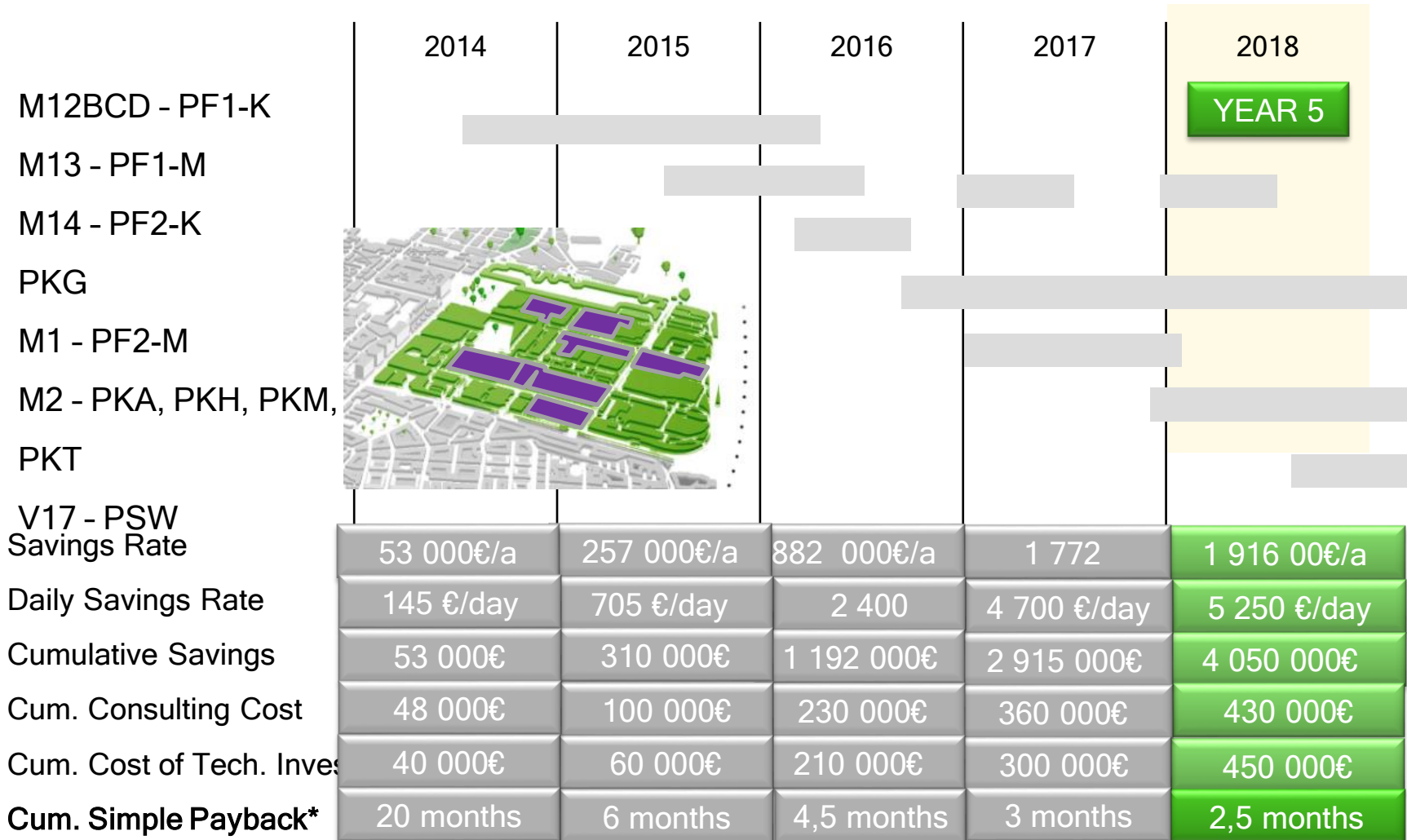
5 years QUEST Program for Energy Savings

The underlying Facts: Timeline and Financial Results



5 years QUEST Program for energy savings

The underlying Facts: Timeline and Financial Results



The QUEST Approach for Energy Management

Substantial Value Delivered

- Reduced energy cost
- Improved reliability through condition monitoring
- CO2 reduction
- Addressing key stakeholder concern over environment
- De-bottlenecking

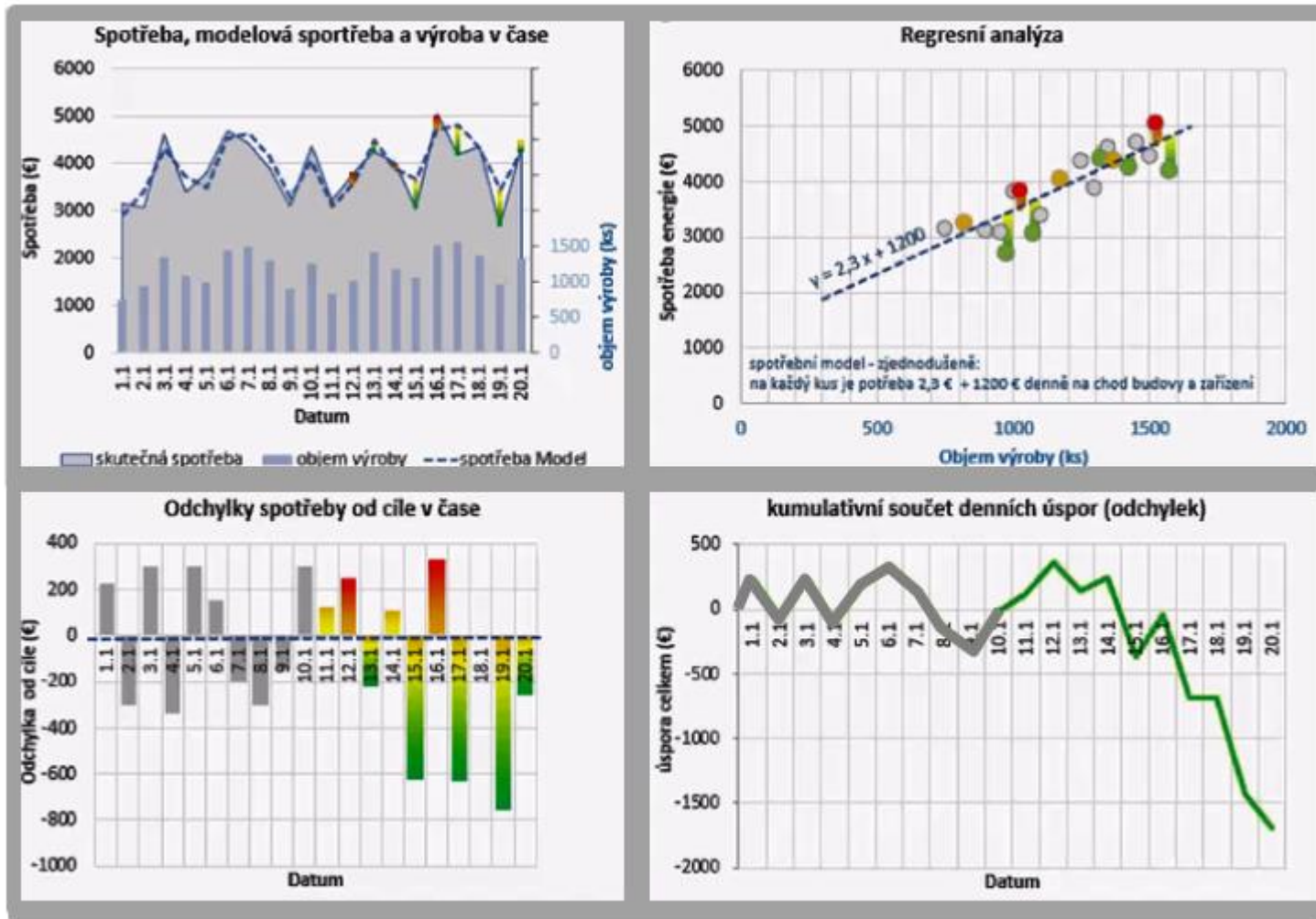
Methodology applicable to other resources, e.g. water, waste

Comparable and complimentary with other systems, such as LEAN, TPM, Six Sigma etc.

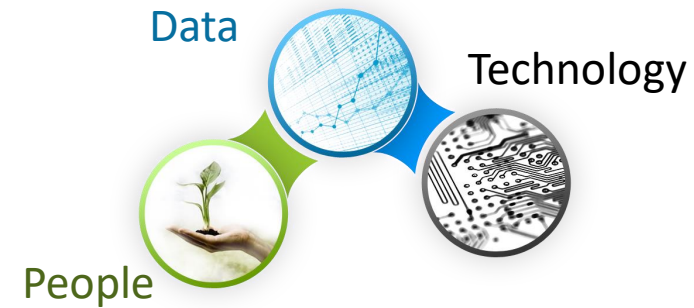


The QUEST Approach for Energy Management

Consumption model based on historic data using Monitoring & Targeting principles

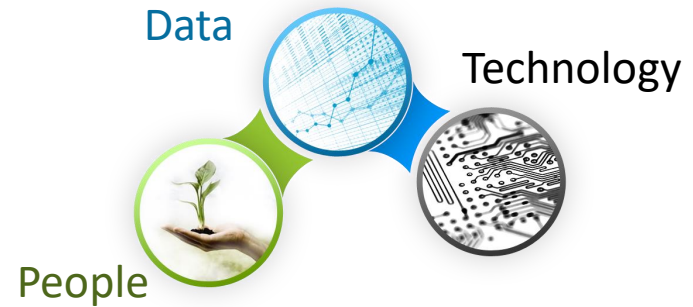


The Journey starts with you



- We begin with understanding your priorities:
 - Cost savings
 - Plant reliability
 - CO2 and environmental performance
 - Competitiveness
- We also need to understand how you would like us to integrate into your existing systems, such as
 - Improvement teams
 - Sources of data
 - Standards and procedures or regulatory requirements

The QUEST Process



1st Phase: QUEST Review Analysis of Savings Potential *2-4 weeks*

- Quantification of Savings potential
- Validation of Savings **by your Team**
- Business Case

2nd Phase: QUEST Implementation *5-8 months*

- Implementation of Measures
- Energy Management Integration
- Training and Support that leads to full Independence

On-going support as long as you wish...

A wakeup call for us all

- IPCC special report of Global Warming
 - We have 12 years to deliver dramatic change
 - And we are very far from where we need to be
- If we believe that our relationship with energy will remain unchanged, then we are deluding ourselves
- We are all in the uniquely privileged position that we are able to do something positive about this through our role driving operational improvements.

What we are sharing is not new

ŠKODA



“The biggest advantage of our cooperation with HEC was that we actually started talking about our energy consumption at all levels of our organization, from the shop floor to the management.”

- *Operations Manager Welding Shop*



Audi
Brussels

“I was positively surprised by your systematic approach.”
“You showed us what a manager should actually do and that is great!”

- *Head of Facility Management*

Valeo

“I am certain that we can create a win-win situation with the QUEST Method.”

- *Plant Manager*

Let's continue the conversation...

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