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Energy Potential Scan (EPS)

**Training on participatory approach of EPS
for Voluntary Agreements on
energy-efficiency improvement**

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EPS training modules

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- 0. Why do we need EPS? What will be the output of EPS?
- 1. EPS participatory method of approach
- 2. Energy Action Team (EAT)
- 3. Support and advice from EPS consultants
- 4. Organisation and planning
- 5. Energy Consumption Analysis
- 6. Efficiency Scans
- 7. Management Scan
- 8. Formulation of Energy-Efficiency Programme (EEP)
- 9. EPS output is input for LTA target setting
- 10. Conclusions and recommendations



Why do we need Energy Potential Scan (EPS)?

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1. Establish VA co-operation (letter of intent)
2. Offer VA incentives (policy framing)
3. Negotiate on VA targets, measures and monitoring
4. Appoint problems and define targets (raise awareness)
5. Conclude and implement VA (including independent agency)
6. Control action through monitoring (plan, do, check, act)
7. Promote information dissemination (multiplication)
8. Communicate intermediate reports (including evaluation)
9. Apply sanctions (push “laggards”)

E
P
S



Example of EPS output

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Inventory of measures and projects via Energy Potential Scan

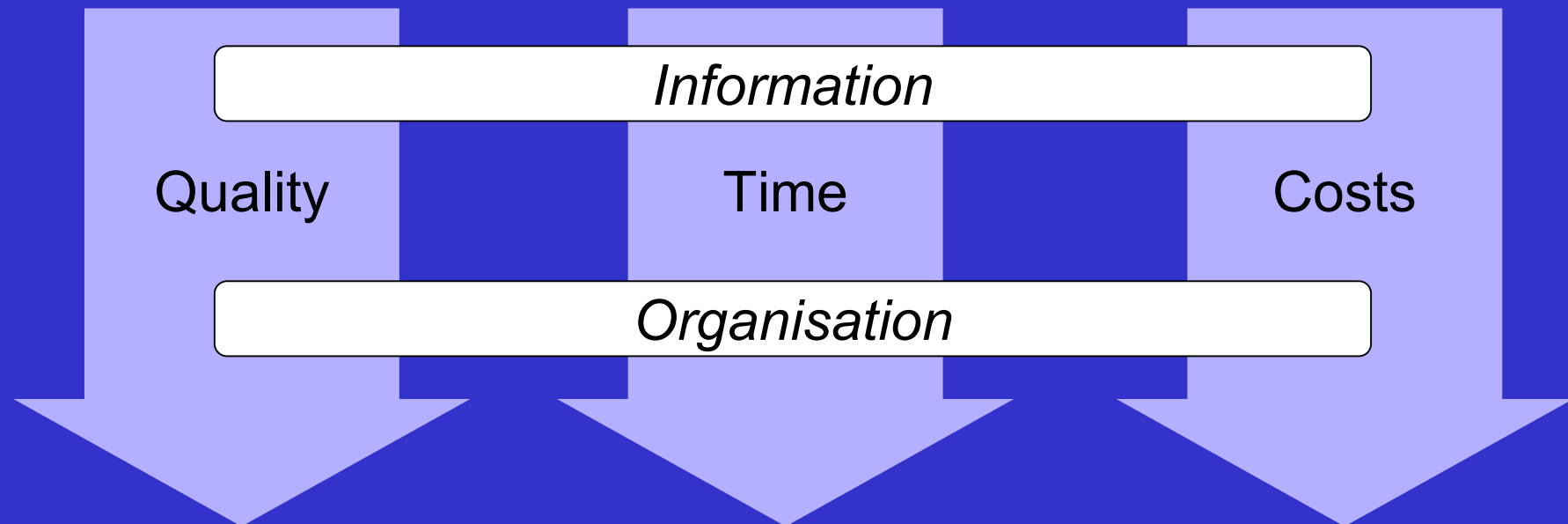
% of Energy Saving	Level 1 PBT of 0-1 year	Level 2 PBT of 1-5 years	Level 3 PBT >> 5 years	Total
Category A Technologically proven in this industrial sector	4	2	3	9
Category B Technologically proven in other industrial sectors	3	2	1	6
Category C R&D pilot option still to be demonstrated	2	5	7	14
Total	9	9	11	29



VA need for EPS

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Elements of required VA process management





EPS participatory method of approach (1 of 5)

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ADVANTAGES OF PARTICIPATORY APPROACH (1 of 2):

- Emotions can be addressed and streamlined, consequently less resistance and more relaxation towards implementation of improvement steps
- Access to high-grade information about problems within company
- Involvement creates more motivation to solve own problems
- Knowledge about fit for purpose of chosen solutions within own situation



EPS participatory method of approach (2 of 5)

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ADVANTAGES OF PARTICIPATORY APPROACH (2 of 2):

- Involvement by exchanging information with colleagues creates awareness of new (second order) problems and positive attitude towards solutions that were not considered to be desirable or realistic on beforehand
- Involvement creates more self-assurance of employees and develops enterprising competences of managers on all levels
- Broad participation leads to better decision-making and performance of all departments within company



EPS participatory method of approach (3 of 5)

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METHOD OF APPROACH ACCORDING TO FORMULA:

$$E = Q * A$$

- E : Effect of the solution to a problem
- Q : Quality of that solution
- A : Acceptance of that solution

- E.g. expert approach : $E = 90\% * 10\% = 9\%$
- E.g. participatory approach : $E = 70\% * 90\% = 63\%$
enabling 80% of results with only 20% of efforts



EPS participatory method of approach (4 of 5)

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EPS AIMS AT GOOD QUALITY AND ACCEPTANCE

- For good/high **quality** the following conditions are required:
 - Involvement of company staff familiar with plant and processes;
 - Presentation/training of EPS tools by experts;
 - EPS support by external consultants or facilitators.
- For creating optimum **acceptance** the following is required:
 - Full commitment at (general) management level;
 - Implementation of EPS under responsibility of plant manager;
 - Involvement of employees of various departments of the plant in co-operation with the external consultants of facilitators.



EPS participatory method of approach (5 of 5)

EPS IMPLIES FOLLOWING IMPLEMENTATION STEPS:

1. Management approves EPS implementation and selects expert staff from various departments for Energy Action Team (EAT).
2. This EAT will implement EPS.
3. EPS tools enable EAT to proceed systematically and efficiently.
4. External EPS facilitators and consultants are environmental and energy experts and have been prepared for this supportive EPS task.
5. EAT draws up a provisional Energy-Efficiency Improvement Programme (EEIP) on the basis of EPS results.
6. Management sanctions and endorses the final EEIP.

In conclusion, the overall result is a high degree of involvement within the plant and a better chance of energy-saving and emission reduction ideas actually being implemented.