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# LEARNING ENERGY EFFICIENCY NETWORKS

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# Background

## Switzerland



First network 20 years  
ago  
about 70 networks

## Germany



first network in 2002  
(Modell Hohenlohe)  
currently 30 networks at  
work

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# Framework

**Target group** from a local area (short distances)

- **10 – 15 enterprises**, mainly manufacturing
- Min. 150.000 € energy costs / year, max. 50 Mio. €
- Different branches
- No direct competitors

**Focus** cross cutting technologies

- boilers, heat- and steam distribution systems
- Heat recovery
- Compressed air
- lighting, ventilation, cooling and air conditioning

Generally no process technologies

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# Benefits

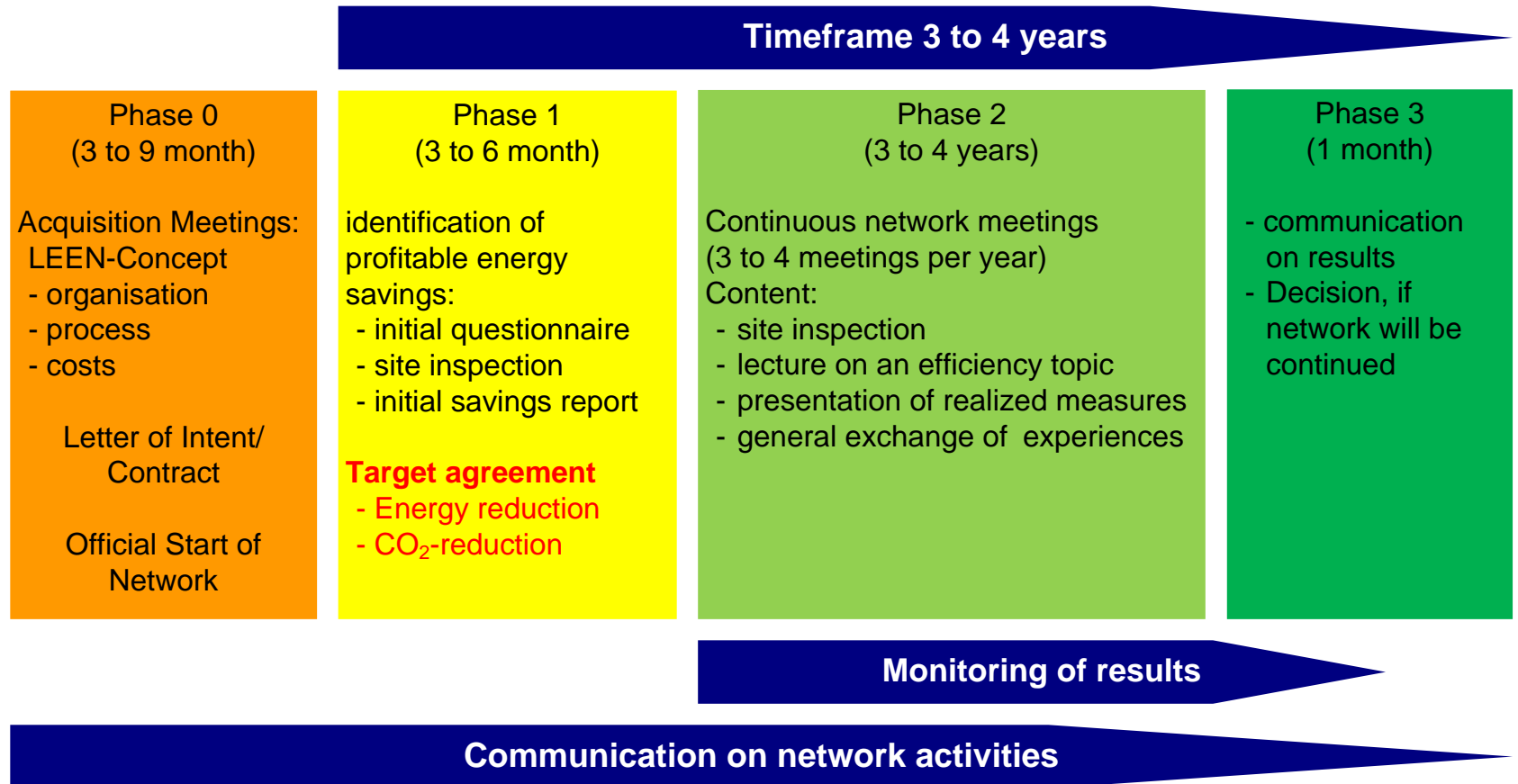
- Good cost/benefit ratio by common use of project infrastructure
- Participation on Best-Practice-Examples
- Reduction of search and decision costs
- Independent evaluation of the measures
- Continuous monitoring
- Increased credibility in climate protection activities
- Continuous improvement of staff qualification

# Energy Efficiency Networks in Germany

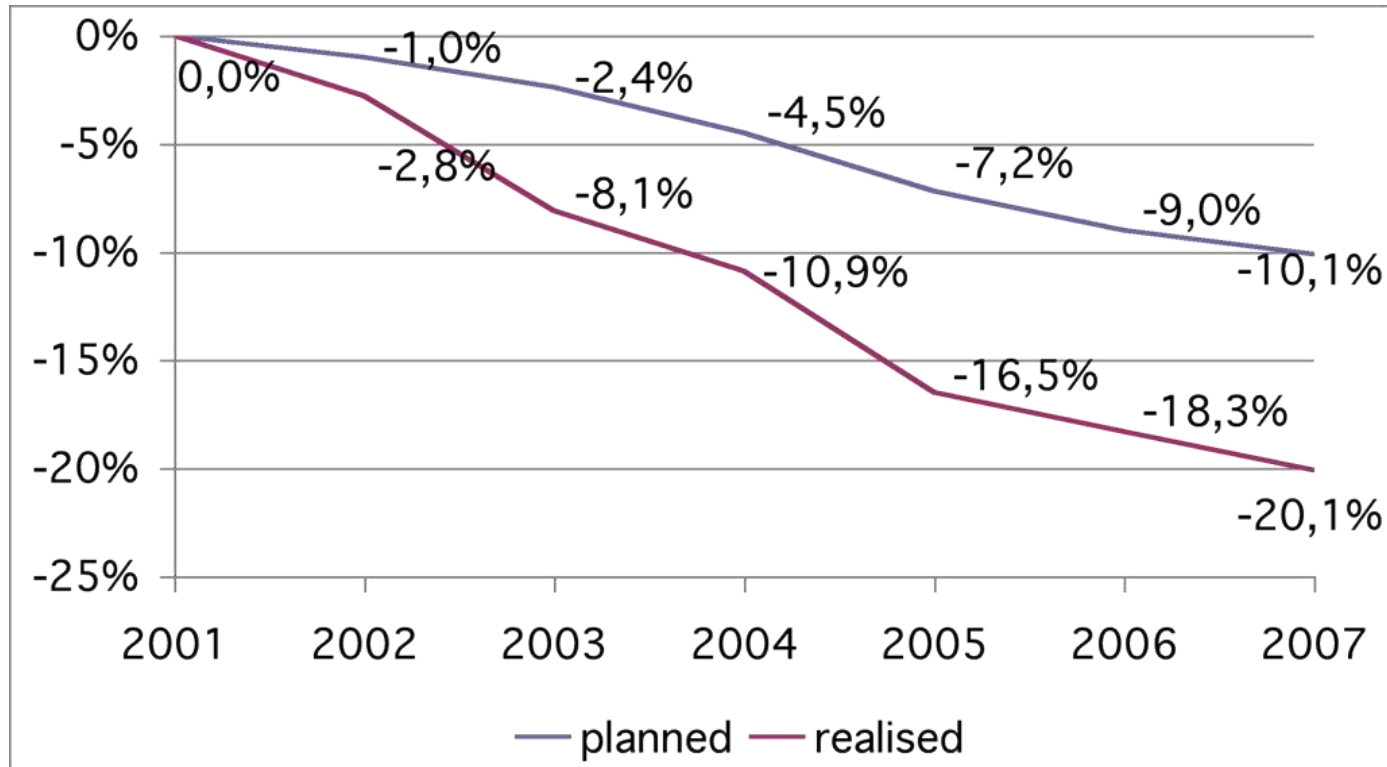


- May 2010: approx. 40 Networks (equals 450 companies)
- Target 2020: up to 700 Networks
- Market potential EU: up to 3,000
- Market potential US: up to 3,000

# LEEN-Network process



# Energy Savings



- Based on 9 companies
- Energy cost reduction: 120.000 €/a
- CO<sub>2</sub> recuction: 17.000 t/a
- Profit per reduced ton of CO<sub>2</sub>: 10-20 €

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# Conclusion

LEEN offers a Management-System to set up and run Energy Efficiency Networks. The LEEN-System includes a variety of computer based calculation tools (e. g. pumps, electrical drives, compressed air, lighting systems) as well as Management Guidelines.

The launch of the LEEN-System is currently supported by the the German Environmental Ministry (BMU).