



Climate Detectives — a German approach to Energy Efficience in Schools Tilman Langner



Insight in our most recent criminal case

Some basic information about the Climate Detectives approach
Energy efficiency in Schools — what's new in Germany



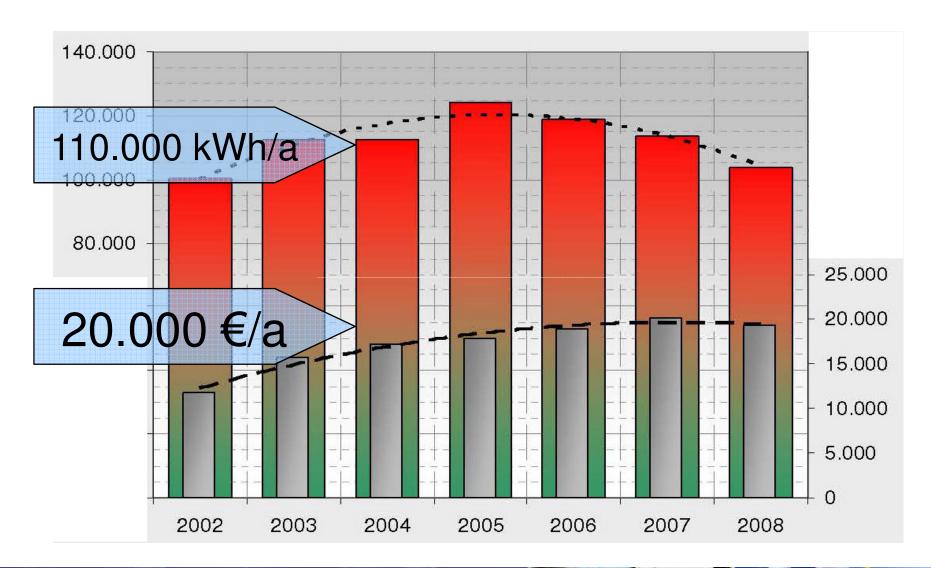
The delict

20.000 € per year for Electricity



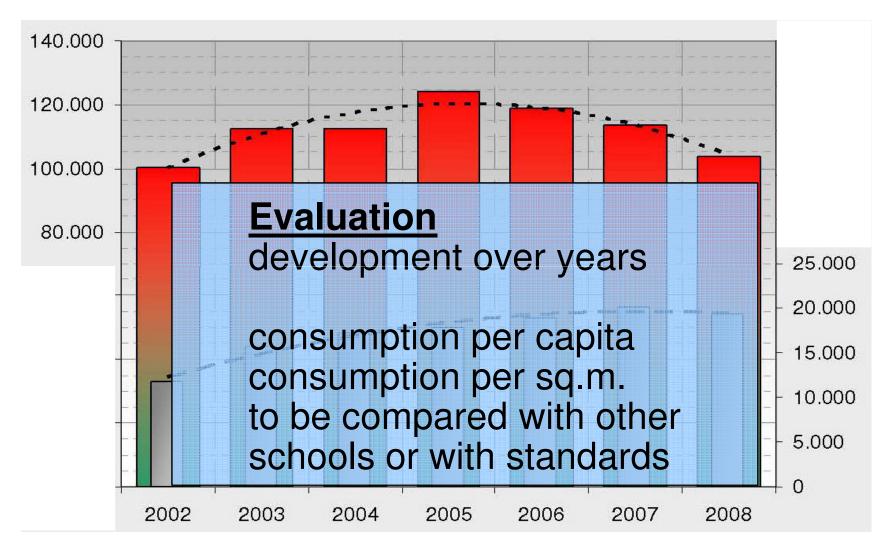


Is it a crime or not?



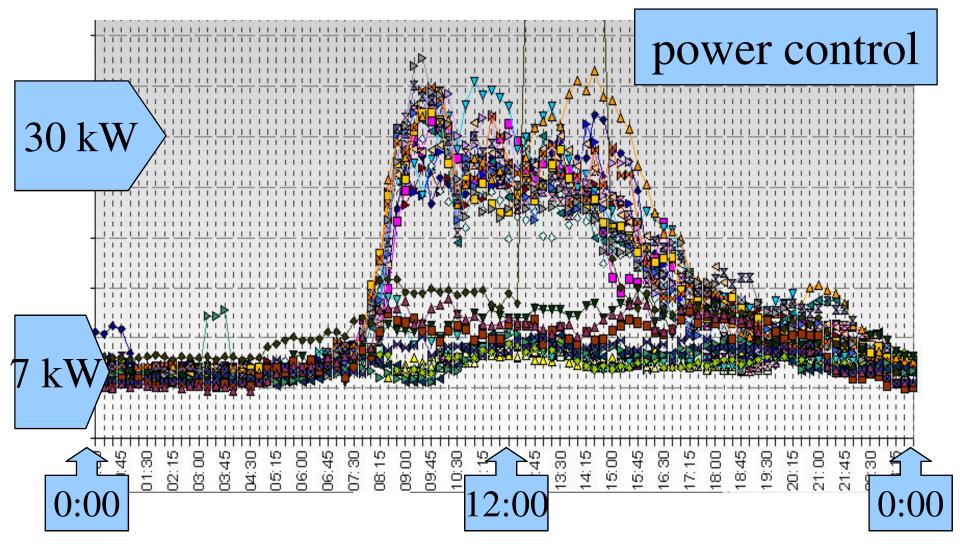


Is it a crime or not?





Fingerprints are required!

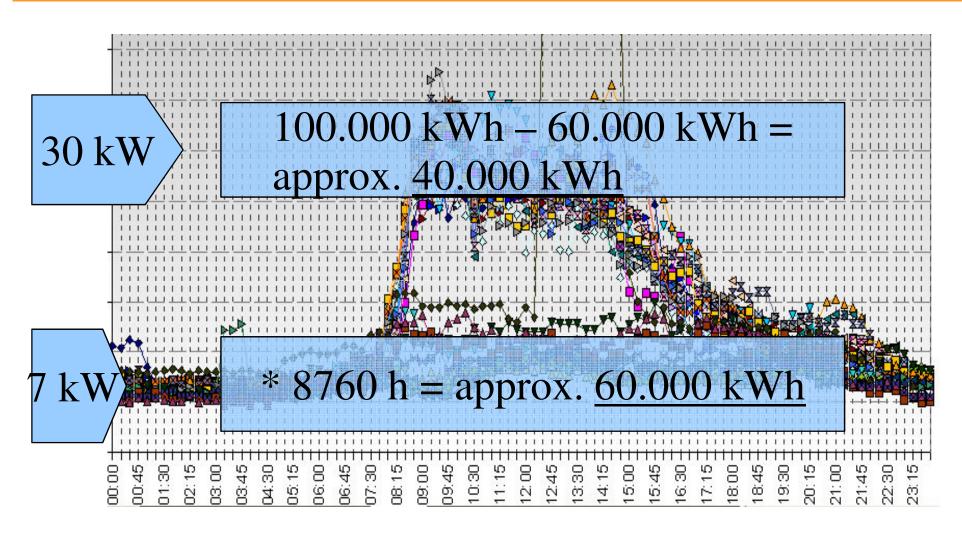








Relevance of delinquent profiles





Who are the delinquents?



 $\underline{\text{Work}} = \text{Power} * \text{Time}$

Pumps, Transformation from Electricity into heat / cold

Computers, Lights











Steps of investigation

Delict, Evaluation

Fingerprints, types of delinquents

details details

assessment: to identify the most important aspects

ideas / measures for improvement

Climate detectives

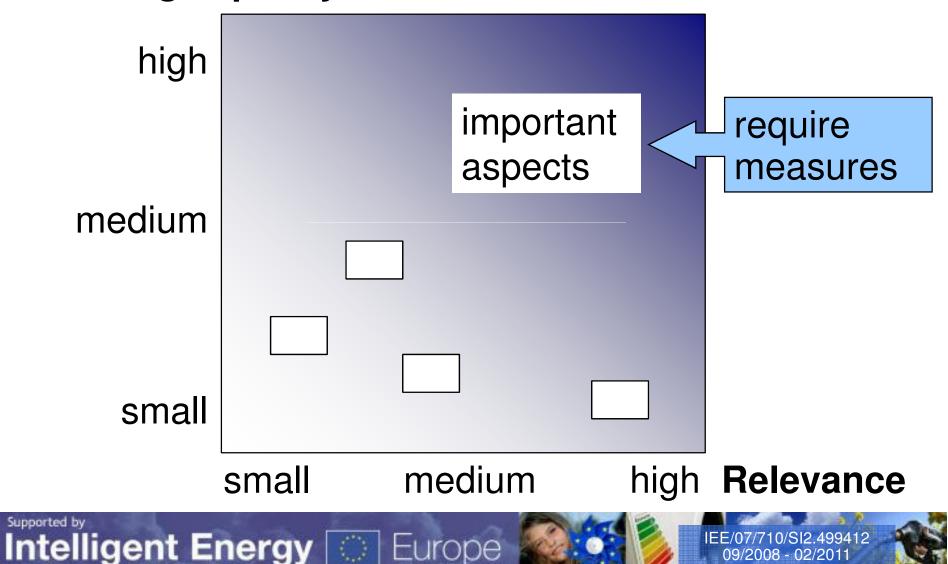
Electricity
heating
waste
water
consumption
traffic

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Assessment of aspects

steering capacity of the school

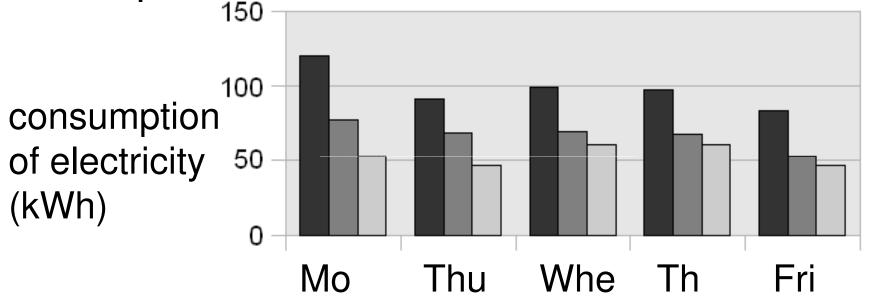




Improvement possible?

Weeks of energy efficiency

Comprehensive School Lütten Klein / Rostock



The school reduced the consumption of electricity during the lessons by 40% (3rd week compared with 1st week)



What's new in German schools?

1990s

Campaigns for energy efficiency

Fifty/fifty (financial incentives for energy efficiency in schools)

Small solar power plants for demonstration (e.g. 1 kW_{peak})

Pedagogical basis: Environmental education

recent years

Campaigns for climate protection

Fifty/fifty 2.0 including masterplan for reduction of CO₂-emissions

Big "citizens solar power plants" at schools (e.g. 30 kW_{peak})

Pedagogical basis: Education for sustainable development

lack in purchasing green



Read more, contact, credits

www.umweltschulen.de/klima/climatedetectives (English) www.umweltschulen.de/klima (German)

Climate detectives manual (German)

Best examples from EU schools www.egs-project.eu (English)

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