

Intelligent Energy  Europe



SEC – TOOLS Lithuania
<http://www.lsa-mkc.lt/sectools/>



energy
efficiency
business
week

EEBW: Energy Efficiency Business Week 2008
12.-13. 11. 2008, KAISERSTEJNSKÝ PALÁC

Efficiency: The tomorrow's energy source



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13. November 2008



Composition of a tool-box

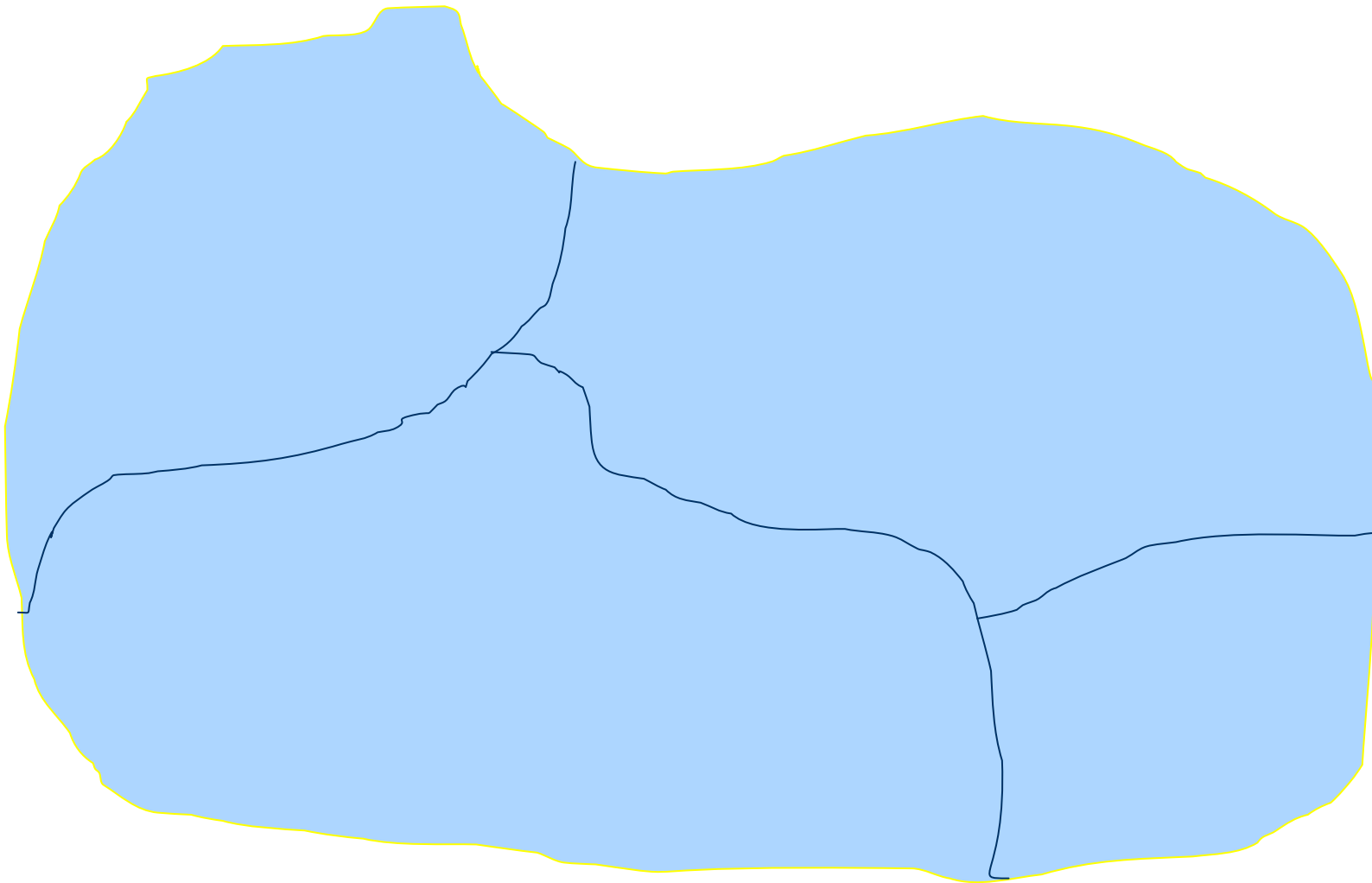
- Tools on energy planning
- Tools on appraisal of energy projects
- Tools on efficient use of energy in buildings
- Tools on energy auditing of buildings
- Tools on energy management in buildings
- Tools on energy service contracts
- Tools on energy pricing
- Tools on raising consumer awareness



Energy supply planning

- Collective generation vs individual generation
- Energy distribution network in densely populated areas
- Minimum supply costs for all customers
- Atmosphere pollution within permitted limits
- Delimitation of energy supply area into zones

Energy supply planning – customer zones



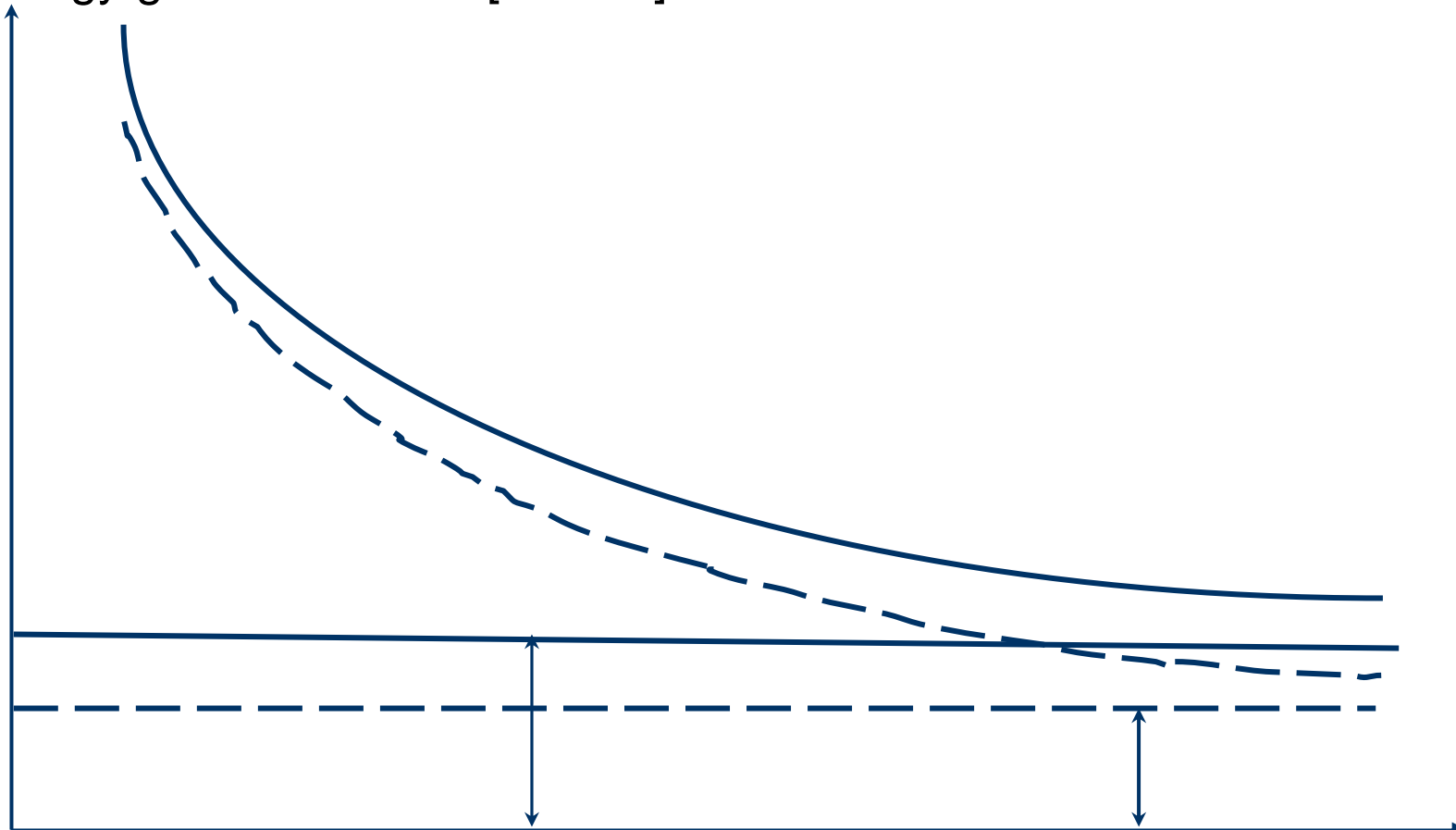


Energy supply planning – reality

- Lack of dialog with potential customers – are they willing to use the planned energy supply mode ?
- Unknown technical and economical data on existing old networks
- Variety of planning methods employed by consulting companies – are they credible ?
- Most often result – “leave everything in status quo”. Was the planning exercise worth efforts and money ?

Energy supply planning – algorithm

Energy generation cost [€/kWh]



Amount of energy generated [MWh]

Energy supply planning – algorithm

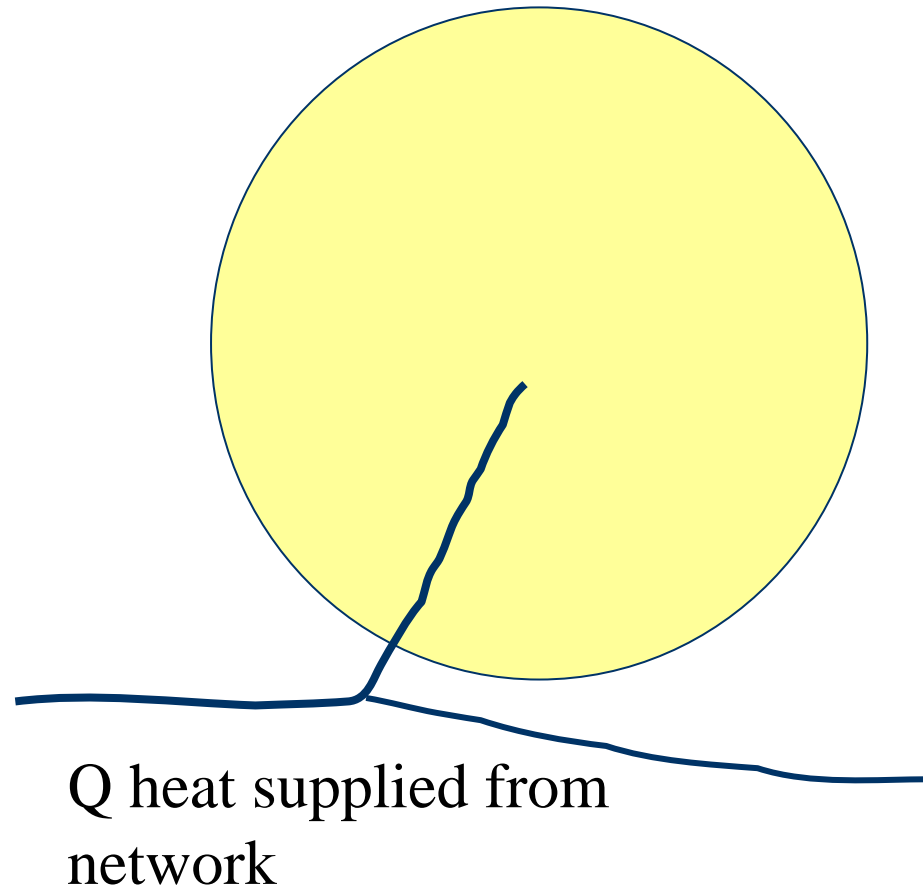
Alternative 1
Individual heat
generation



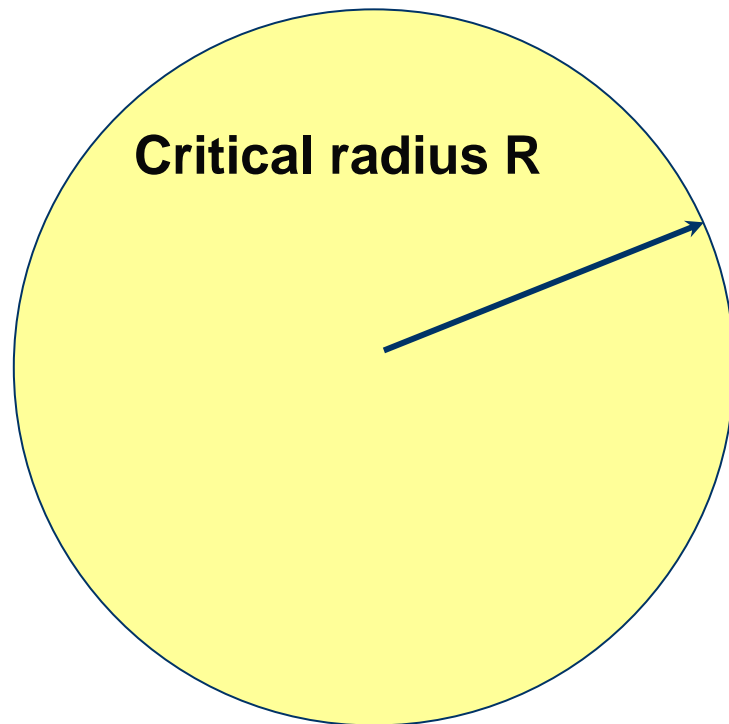
Q heat produced
autonomously

Alternative 2

Collectively generated heat
supplied from network



Energy supply planning – algorithm



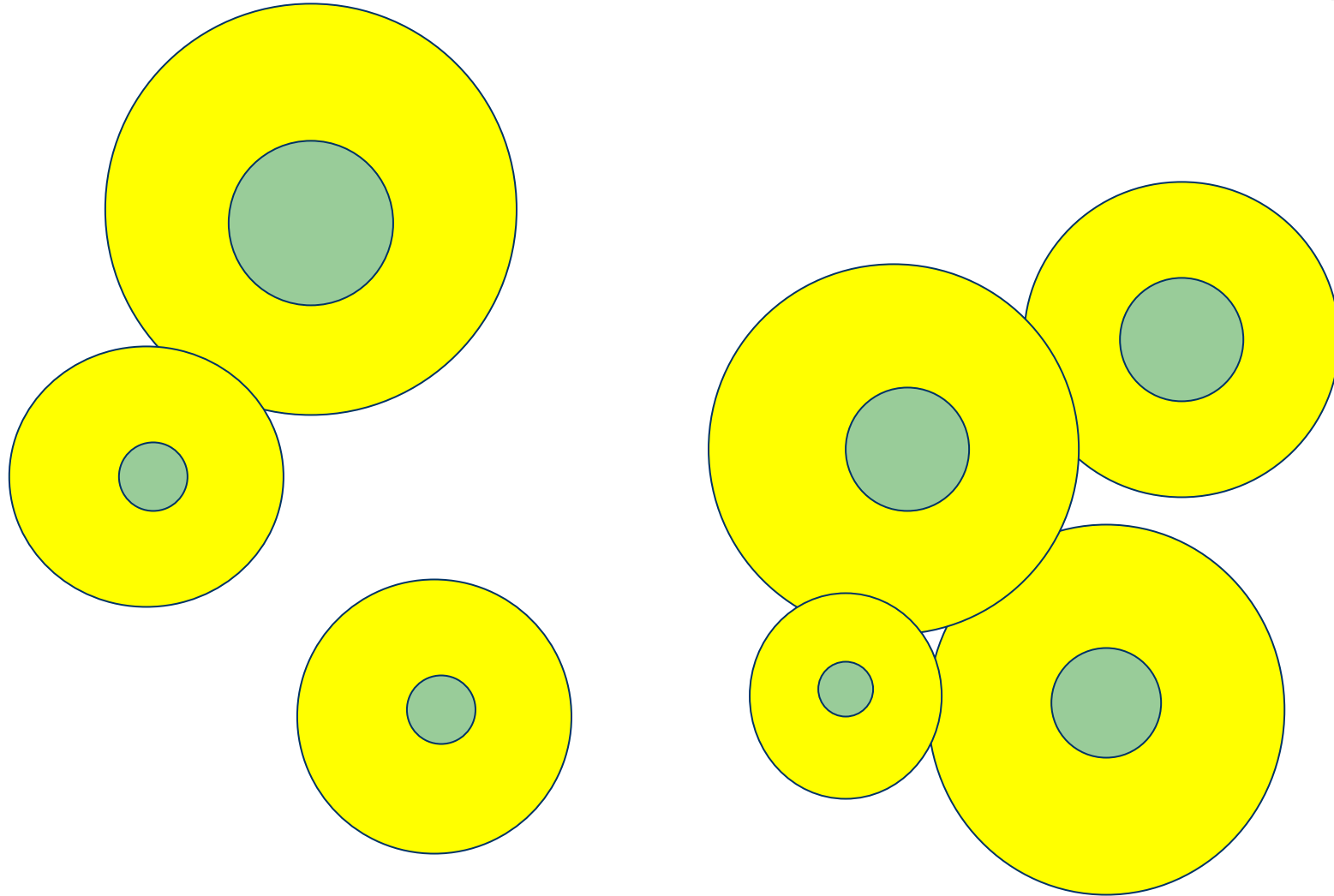
R derived from the condition:

Cost of 1 unit of heat produced
autonomously =

Cost of 1 unit of heat produced
centrally and supplied from
network +

Cost of construction of the
connecting pipe of R length

Energy supply planning – algorithm





Appraisal of energy projects

- Economic analysis
- Financial analysis
- Financing plan and loan service



Efficient use of energy in buildings

- Educational brochures for consumers
- Heat cost allocation methods
- Legal information intended for vulnerable consumers (fuel poverty)
- Information on the state assistance on modernisation of buildings



Energy auditing of buildings

- Energy auditing guide
- Software
- Recommendations on the use of specialised equipment (eg data loggers)
- A few practical cases with comments and explanations



Energy service contracts

- Template contracts on lease of municipal heat economy to a private operator
- Template contracts on energy efficiency improvements in public buildings
- Template contracts on energy efficiency improvements in private buildings
- Template contracts on industrial energy equipment operation by private operators



Energy pricing

- Fast raising Russian gas prices and district heat prices – a lot of disputes and court cases
- Guide to municipality on heat pricing
- Legal advise on pricing
- Special software to quickly check heat prices