



## Procurement on modernisation of the server platform of the municipality

New server equipment with better performance and high energy savings

- Reduced operation costs for cooling



### Standard product / old tender

- Server platform with 12 units and yearly energy consumption of 106.000 kWh

### GPP tender

- Five times higher data storage capacity. Larger network and fewer units
- Reduced need for cooling of servers

### Results

- 80% energy saving, 85.000 kWh/year
- CO<sub>2</sub>-emission reduction: 30 tons/year
- Cost saving from O&M: 17.000 €/year
- Improved datacapacity

## Introduction to case

### 1.1 PITCH-TALK – SUMMARY

The Municipality of Lejre decided to conduct a procurement on modernisation of the server platform in the administration. The procurement modernized the IT server platform, increased data capacity double, reduced cooling need and energy consumption with 85.000 kWh/year.

### 1.2 CASE CONTENT AND CASE ISSUE

The Municipality of Lejre had an older server platform with increasing lack of data capacity and insufficient for further upgrading. It was therefor decided to invest in a new server platform.

A preparatory work concluded that investment need for a new platform would be approx. 130-150.000 € but an optimal dimension could assure large energy saving related to operation and cooling. An analysis of financial data and the saving potential showed a pay back scenario of 6-8 years.

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### 1.4 SOLUTIONS APPLIED

Lejre Municipality has implemented an IT server platform covering replacement of 11 servers throughout the administration unit. The new platform consist of four servers (Cisco UCS M240 with internal storage and these servers provide double storage capacity compared to the old system and network speed were raised from 176 Mbps to 1280 Mbps.

## Contract tendered

- a) **Subject Matter:** Modernization of serverplatform
- b) **Value of contract:** below 130.000€.
- c) **Procedure:** The tender followed a restricted procedure, consisting of a pre-qualification phase and a tendering phase.
- d) **Type of contract:** The contract comprise supply and installation of new servers and related equipment operation.
- e) **Nature of contract:** Direct contract.
- f) **Division in lots:** None

## Procurement objectives

The procurement objectives were twofold:

- a) Modernize server platform and increase data storage capacity
- b) Implement an energy efficient system with reduced energy consumption and reduced need for cooling.

An initial assessment concluded a potential to reduce operation and maintenance cost with 60-80%. The yearly saving was estimated to 17.000 €. The savings will be achieved

through energy savings, reduced license cost. Furthermore it may expect reduced man hours to maintenance of four new servers instead of 11 old servers.

As preparation for the tender, a consultant report was conducted including recommendations for a tender and based on marked experiences and considering applying life-cycle costing.

## Procurement approach

The procurement was an open tender comprising supply of equipment and installation.

The tender used standard eligible criteria for financial, legal and technical capacity.

Award criteria was:

- quality (50% weight)
- price (50% weight).



Evaluation of quality refers to an appendix stipulating a project description. Highest score are given to the tender that best meet the stipulated task and requirements defined in the project description.

Evaluation of price are assessed as lowest price for the total solution as required in the project description.

No specific energy criteria are used, e.g. minimum specifications for energy consumption etc. This is up to the bidder to propose. Hence, a general formulation was stipulated in the introduction to the tender, that a energy efficient and low noise solution were emphasised.

Detailed specification of data need and functions were provided in appendixes to the tender.

## Criteria development

The tender documents are developed and defined from initial studies and data of previous operation, an assessment report determining saving potentials and estimated investment cost and general knowledge to the subject. An assessment of feasible IT concepts/product solution has indirectly been delivered in the consultant report. General inspirations are received through case-experiences from other Danish municipal stakeholders.

## Results

	Investment volume (€)	Expected Energy savings (€/year)	Expected CO <sub>2</sub> reduction (tCO <sub>2e</sub> /year)		Payback time (€)
	130.000 or lower	17.000	30		7,5 years

The yearly energy expenses for operation of the new units are approx. 4.500 €. The average energy saving is 80% per year when comparing to the existing equipment. The yearly energy saving is therefor calculated to approx. 17.000 € and 86.000 kWh/year (existing IT equipments energy expenses are 21.500 €/year). The average CO<sub>2</sub> emission per kWh is approx. 0,35 kg. The CO<sub>2</sub> emission per kWh (Official data for DK CO<sub>2</sub> emission from 1 kWh vary from 0,35 – 0,5 kg depending on particular year).

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## Lessons learned

This case can be replicated to all entities with older server systems to be modernized.

## Contact

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## About PRIMES



Across six countries in Europe; Denmark, Sweden, Latvia, Croatia, France and Italy, PRIMES project seeks to help municipalities overcome barriers in GPP processes, many of which lack capacity and knowledge.

PRIMES aims to develop basic skills and provide hands-on support for public purchasing organisations in order to overcome barriers and implement Green Public Purchasing. This will consequently result in energy savings and CO<sub>2</sub> reductions.– [www.primes-eu.net](http://www.primes-eu.net)

## About GPP 2020

GPP 2020 aims to mainstream low-carbon procurement across Europe in support of the EU's goals to achieve a 20% reduction in greenhouse gas emissions, a 20% increase in the share of renewable energy and a 20% increase in energy efficiency by 2020.

To this end, GPP 2020 will implement more than 100 low-carbon tenders, which will directly result in substantial CO<sub>2</sub> savings. Moreover, GPP 2020 is running a capacity building programme that includes trainings and exchange. – [www.gpp2020.eu](http://www.gpp2020.eu)



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This information is **for general guidance only and shall not be treated as legal advice**. In case you have any questions related to the procedure please contact the partner as indicated in this document.