## BASIC LCA FOR A MULTI STOREY RESIDENTIAL BUILDING

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# Modernatus GRONSKAR Mansion block, 8 stories 32 apartments 14 garage and 22 parking places Building start Spring 2008 Gross area (ETA): 2.938 m2 Letable area (BOA): 2.249 m2 Energy for heating. 80 kWh/m2 District heating A heat pump on exhaust air Hollow concrete elements for walls Wall insulation: polystyreme Mean U-value: 0,46 W/m2,K Builder SKANSKA

### Gronskar

### Aim(s) of the case-study:

To test simplified LCA calculations on a typical new building, compare it with a reference building and communicate results with stakeholders (revised).

### Status of the Case Study in April 2008

Energy and constructions data has been gathered A SimaPro course has been attended

### Organization of the work

Cooperation between Sweden, Malta and Italy

### Main tasks to be developed

Define sytem boundaries and functional unit Decide on scope of the work and who will do what Perform LCA and find possible simplifications Find a suitable way of presenting the results to stakeholders

Needs and expectations for collaborative work between Working Grp

Exchange of experience of LCA calculations for building structures Exchange of suggestions for simplifications and LCA result presentations



# Belgrade meeting discussions

Good to compare with reference – Swedish ref, Majroparken Communication with stakeholders good

Stakeholders: residents, management people, Skanska Certifying only the construction

Service life included?

Who designed the building, why did they chose this solution? Nobody apart from Mauritz and Renata has SimaPro or similar tools

This means that we have to restrict the work very much.

- •Only energy use throughout operation phase average data
- Only materials production
- •Swedish data if not local is available
- •Minimum effect categories those shown by Ricardo

Mauritz send more information on the project within 14 days and emissions on energy in Sweden Mauritz makes a template for emission from materials production