

# NEGST WP2 QUESTIONNAIRE

## for residential building industry and building-collectives

**Info:** Please send questionnaire back till 30th of April 2005

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to: **arsenal research**  
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A - 1030 Vienna  
Austria  
..



### Information about your company:

Name of company: .....

Branch of trade: .....

Number of employees:..... Number of flats built in 2004:.....

Street: .....

ZIP-Code / City: .....

Telephone: ..... Fax: .....

E-Mail: ..... Homepage: .....

### General Information:

#### 1. In which fields of business does your company have experience with larger solar systems?

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> New building construction | <input type="checkbox"/> Architecture                   | <input type="checkbox"/> Operator (eg. Facility Management) |
| <input type="checkbox"/> Renovation                | <input type="checkbox"/> Building collective / Investor | <input type="checkbox"/> Others: .....                      |
| <input type="checkbox"/> Planning and design       | <input type="checkbox"/> General contractor             |   |

#### 2. How many systems for solar heat generation have been realised in the projects of your company since the start?

..... < 20 m<sup>2</sup> Collector area      ..... 50-150 m<sup>2</sup> Collector area      ..... > 500 m<sup>2</sup> Collector area  
 ..... 20-50 m<sup>2</sup> Collector area      ..... 150-500 m<sup>2</sup> Collector area

#### 3. In how many of your projects are large solar systems in use, or are requested from you or a potential analysis is initiated by your company?

In use:	<input type="checkbox"/> 0 % of projects	Requested:	<input type="checkbox"/> 0 % of projects	Potential analysed:	<input type="checkbox"/> 0 % of projects
	<input type="checkbox"/> < 5 % of projects		<input type="checkbox"/> < 5 % of projects		<input type="checkbox"/> < 5 % of projects
	<input type="checkbox"/> 25 % of projects		<input type="checkbox"/> 25 % of projects		<input type="checkbox"/> 25 % of projects
	<input type="checkbox"/> 50 % of projects		<input type="checkbox"/> 50 % of projects		<input type="checkbox"/> 50 % of projects
	<input type="checkbox"/> 75 % of projects		<input type="checkbox"/> 75 % of projects		<input type="checkbox"/> 75 % of projects
	<input type="checkbox"/> 100 % of projects		<input type="checkbox"/> 100 % of projects		<input type="checkbox"/> 100 % of projects

#### 4. In which of these periods large solar systems have been constructed in your projects?

	Amount:		Amount:		Amount:
<input type="checkbox"/> before 1980	.....	<input type="checkbox"/> 1986 to 1990	.....	<input type="checkbox"/> 1996 to 2000	.....
<input type="checkbox"/> 1981 to 1985	.....	<input type="checkbox"/> 1991 to 1995	.....	<input type="checkbox"/> 2001 till today	.....

## Aspects of acceptance:

5. Concerning your branch which are the main important reasons for consideration of solar thermal heat in the energy concept?

- |  |  |
|--|--|
| <input type="checkbox"/> Energy cost savings   | <input type="checkbox"/> Reaction to customer request        |
| <input type="checkbox"/> Image of the involved company (ecological, future-oriented) | <input type="checkbox"/> Reduction of costs due to subsidies |
| <input type="checkbox"/> Basic requirement for favoured dealing of subsidies         | <input type="checkbox"/> Other: .....                        |

6. How is the reaction of prospective inhabitants about the solar system?

.....% predominatly positive      .....% predominatly negative      .....% neutral      .....% unknown

7. Are the most of the prospective inhabitants/owners informed about the ecological and economic advantages of operating a solar system?

- | Yes                      | In which way:             | ecologic                 |                          |                          | economic                 |                          |                          |
|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                          |                           | well-informed            | moderate                 | not at all               | well-informed            | moderate                 | not at all               |
| <input type="checkbox"/> | handout                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | Orally                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | Poster / Info board       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                          | other way of information: | .....                    |                          |                          |                          |                          |                          |
| <input type="checkbox"/> | Not informed              |                          |                          |                          |                          |                          |                          |
| <input type="checkbox"/> | Do not know               |                          |                          |                          |                          |                          |                          |

8. At present solar systems are used only sporadic in new larger buildings as well as in renovated larger buildings. Please tell from your point of view which could be the reasons therefore?

Please mark from 1 to 5. System: 1 stands for important reason and 5 for minor reason:

- |  |  |
|--|--|
| ..... Financial payback period too long                            | ..... Solar systems suffer from a negative image in branch due to previous bad experiences |
| ..... Not sufficiently economic in operation                       | ..... Technology too ambitouos   |
| ..... Problems at building integration                             | ..... Decision makers have lack of information   |
| ..... Planning and organisation too difficult                      | Other: .....   |
| ..... Solar system provides only a minor part of the required heat | .....  |

## Organisational aspects:

9. Does your country offer any legal possibilities to cover extra costs for building renovation using a solar system by higher lease or selling costs of the renovated flats or houses?

- Yes      Remarks: .....
- No      .....

10. Concerning the following organisational aspects which of them are known by you and how was your experience with them?

Please mark from 1 to 5. System: 1 stands for very good experience and 5 for bad experience:

- No experience:      Experience made:
- ..... "Integral planning" - consideration of solar system since start of planning the building  
additional comment:.....
- ..... Consideration of solar system already in the contract award of HVAC  
additional comment:.....
- ..... Guaranteed solar-yield by a company  
additional comment:.....
- ..... Quality management system installed at involved parties  
additional comment:.....

- ..... Third party financing (Saving- or System contracting)  
additional comment:.....
- ..... Monitoring of yield by an independent institution  
additional comment:.....
- ..... Certification of system by an independent expert  
additional comment:.....

Other: .....

.....

**Aspects of technology and quality:**

**11. Is there any action undertaken by your company to assure the efficient operation of the solar system?**

- Simulation in phase of planning
- Measurement instrumentation to control the function of the system
- Maintenance of the solar system by an authorized / specialised company
- Guaranteed yield based on the real measured solar system yield

**12. How high is the percentage of solar systems realised by your company where systems for function- and yieldcontrol are in use?**

..... % at systems up to 150 m<sup>2</sup>                      ..... % at systems up to 500 m<sup>2</sup>                      ..... % at systems > 500 m<sup>2</sup>

**13. Please estimate the specific system costs (planning, components, construction and start of operation; excluding taxes and auxiliary heating system) for the following solar system installed in your country?**

200 m<sup>2</sup> collector area built on stilts on a flat roof . Designed for 40% solar supported warm water supply of a 4 floor multifamily residence:

..... € per m<sup>2</sup> collector area

**14. From your point of view which are the most important facts for a positive development of solar energy usage in the field of large residential buildings?**

**Please mark from 1 to 5. System: 1 stands for important facts and 5 for minor facts:**

- |  |  |
|--|--|
| ..... Qualitative products             | ..... Convenient subsidy scheme          |
| ..... Proven reliable system operation | ..... Higher trained planning parties    |
| ..... Reduction of costs               | ..... Existence of several good examples |

Other: .....

**15. If there is any exemplary large solar system realised by your company please tell us where we can get further informaton about it:**

.....

.....

.....

.....

**16. Additional Remarks**

.....

.....

.....

.....

**17.  Please mark here if you would like to have a copy of the summary of this survey.**

**Thank you for your cooperation!**