



**D3.1 COMMON ANALYSIS GRID**  
**WP3 TOOLS AND INSTRUMENTS UNDER SCRUTINY**

**August 2015**



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This report represents a preliminary work of the 'Common Analysis Grid', status August 2015. It gets further developed during the task 3.1 of WP3.

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## 0. GUIDING PRINCIPLES

In this WP, “instruments and tools” are studied

- ➔ that **integrate energy aspects in the spatial planning/town planning process as well as in the planning of concrete urban areas**
- ➔ that are **currently used** in the participating cities in the planning processes (tool development as such will not be part of the project)
- ➔ that are considered **the most important** to avoid filling out the grid for each of them
- ➔ that are separated? from the WP4 “Governance” : WP3 will not consider the governance process but all the external? and available means to integrate energy aspects in this process
- ➔ that are separate from the WP2 “Innovative Technology” : WP3 will not consider innovative technological solutions implemented in the urban project.

There is a difference between instruments and tools, please pay attention to these definitions that the WP3 will refer to throughout its duration:

**Instruments are different ways of influencing urban energy planning**, such as:

- *legal instruments (land use/building regulations, master plans), mandatory or voluntary plans as well as competitions and instruments of cooperation and structured dialogue with key stakeholders*
- *Instruments under private law, or financial instruments, location development and real estate strategy of cities might also be looked at as effective means for influencing concrete planning...*

**Tools are supporting means used when applying an instrument**, such as:

- *solar registers, guidelines for energy planning and energy open data, checklists of technological options to be considered, tools for monitoring and verification,*
- *Innovative tools might e.g. be tools that account for embedded energy as well as tools to assess and/or certify the energy performance of districts including buildings and mobility...*

This work package is divided in two sessions:

- 1) Mapping step: You will first **map most instruments and tools** by organizing them in a specific chart.
- 2) Analysis step: You will then **study the most important ones only by filling out the analysis grid** for each of them.

Instruments that are not in the hand of the cities but on e.g. at state level, will be part of the mapping but we leave you the choice of analyzing them with the grid if they seem relevant to you.

### 1. MAPPING STEP

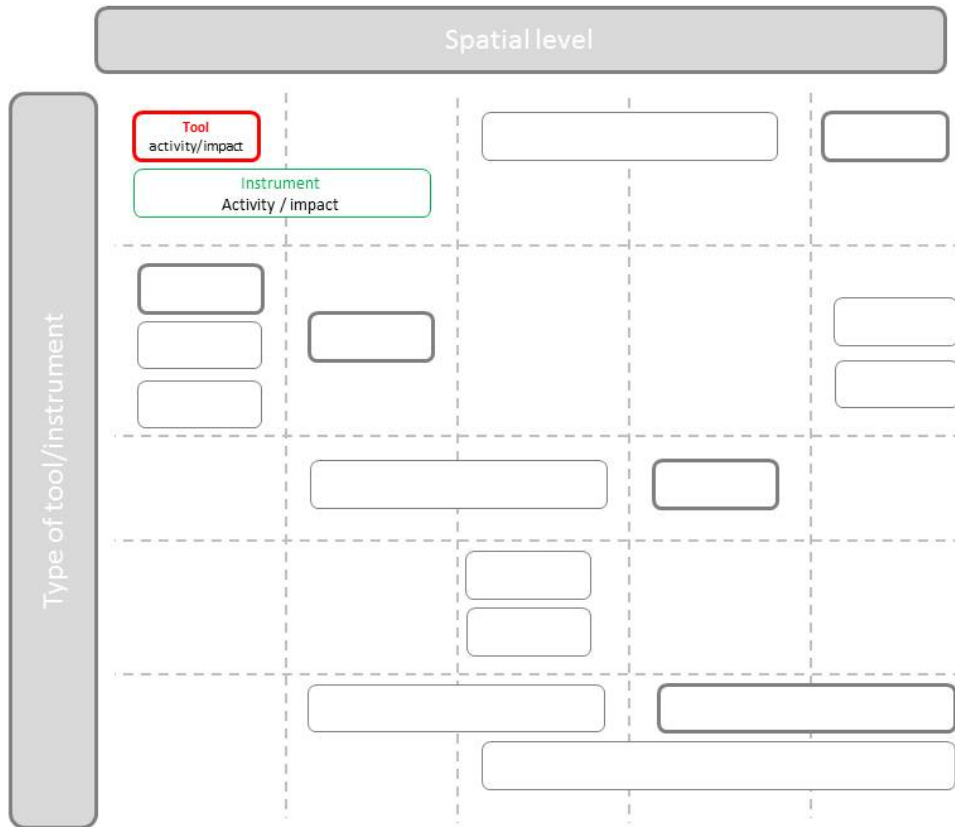
In a first step the UL partner should identify all relevant tools and instruments. In order to do so, a mapping is proposed using 3 criteria:

- spatial level
- type of instrument/tool
- activity/impact

The first tab on the Excel file shows these criteria with a board such as:

		Spatial Level			
		City/Region	District	Quarter	Building
Type of instruments/tools	Regulation/Directive	<b>Name of the first instrument/tool</b>	...	...	...
		For each, specify the activity/impact thanks to the drop-down menu : - <b>Strategic, steering, coordinating /Decision making</b> - <b>Consulting / Support</b> - <b>Operative, executing</b> - <b>Research</b>			
		<i>Name of the second instrument/tool</i>	...	...	...
		<i>Impact</i>			
	Certification/Label	...	...	...	...
	Strategy documents/ Programme	...	...	...	...
	Charter	...	...	...	...
	Software Tool	...	...	...	...
	Guidelines	...	...	...	...
Financial	...	...	...	...	

**As a result each partner should obtain a mapping of its tools and instruments regarding the 3 criteria.**



UL partners can decide what are the most important instruments/tools. They will be identified using bold, whereas tools will be written in blue and instruments in red.

## 2. ANALYSIS STEP

For each tool/instrument, the following questions are asked in the second tab of the Excel file:

### 2.1. Basic information part (sort of ID)

- |                                                                                                                                                            |                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <b>1. Name of the tool/instrument</b>                                                                                                                      | <i>free response</i>     |
| <b>2. Country</b>                                                                                                                                          | <i>list of choices</i>   |
| <b>3. City member of the consortium (if at city scale)</b>                                                                                                 | <i>list of choices</i>   |
| <b>4. Set up date and update</b>                                                                                                                           | <i>date format</i>       |
| <b>5. Is it an instrument or a tool?</b><br><i>Please refer to the definition on page 1</i>                                                                | <i>Instrument / tool</i> |
| <b>6. Spatial level</b>                                                                                                                                    | <i>list of choices</i>   |
| <b>7. Kind of activity/impact</b><br><i>Please note that you have already answered that question during the mapping step</i>                               | <i>list of choices</i>   |
| <b>8. What type of tool or instrument is it?</b><br><i>Please note that you have already answered that question during the mapping step</i>                | <i>list of choices</i>   |
| <b>9. Tool/Instrument initiator</b><br>Did the initiation imply a multi-partner process? Please list major partners and specify status (public/private)    | <i>free response</i>     |
| <b>10. Target stakeholders (users)</b><br>Does the use imply a multi-partner process? Please list major partners and specify their status (public/private) | <i>free response</i>     |
| <b>11. Reporting managers</b><br>Does the reporting imply a multi-partner process? Please list major partners and specify their status (public/private)    | <i>free response</i>     |
| <b>12. Main goals/objectives of this instrument/tool</b>                                                                                                   | <i>free response</i>     |
| <b>13. Outputs (results, indicators...) of this instrument/tool</b>                                                                                        | <i>free response</i>     |
| <b>For instruments only</b>                                                                                                                                |                          |
| <b>14. What commitment does it imply?</b>                                                                                                                  | <i>list of choices</i>   |
| <b>15. Can it be subject to contracting?</b>                                                                                                               | <i>Y/N free response</i> |

## 2.2. Analysis part

In this analysis part, a list of different energy-related issues is suggested for you to define:

- 1) When does the tool/instrument consider each issue?
- 2) To what extent does the tool/instrument have an influence on this issue and during which stage of the urban project?

### List of items: [What?]

The analysis part is based on several items divided in 5 categories.

1. **Sector:** which sector(s) of energy use is considered by the tool or instrument?
2. **Part of energy system:** which part(s) of the energy system does it influence?
3. **Kind of energy source:** does it consider renewable energy sources or not?
4. **Building structure:** does it apply to new construction or building stock/refurbishment?
5. **Further considered issues:** other issues that are not directly related to energy.

A tool or an instrument can of course have impacts on several items of each category and during several stages.

A few clarifications:

**Embedded energy** corresponds to the total energy required for the extraction, processing, manufacturing and delivery of building **materials** to the building site.

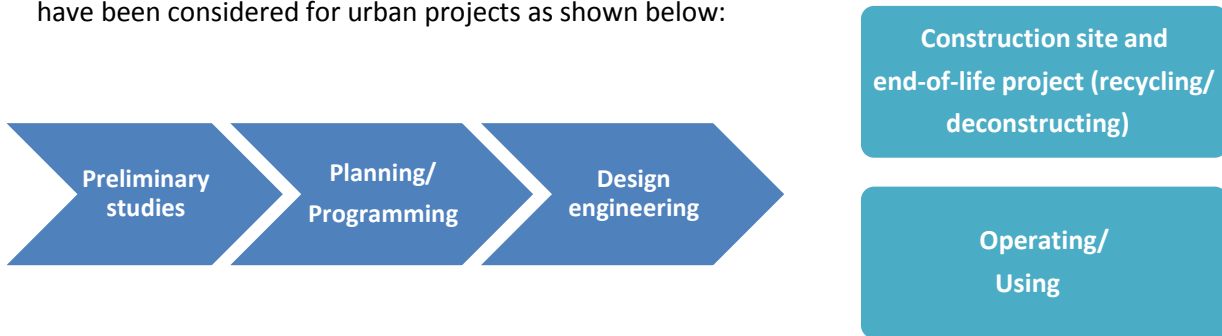
**Water** is considered as a separate issue from energy in the last category (5. Further considered issues). It therefore relates to water management and water resources but not hot water supply.

<b>1. Sector</b>
Mobility/Transport
Heating
Cooling
Electricity
<b>2. Part of the energy system</b>
Energy generation
Energy distribution
Energy consumption
Embedded energy
<b>3. Kind of energy source</b>
Renewable energy sources
Non-Renewable energy sources
<b>4. Building structure</b>
Building stock (refurbishment)
New buildings
<b>5. Further considered issues</b>
Governance
Water
Waste
Environmental protection
Mitigation (GHG emissions reduction)
Adaptation to climate change
Social, ...



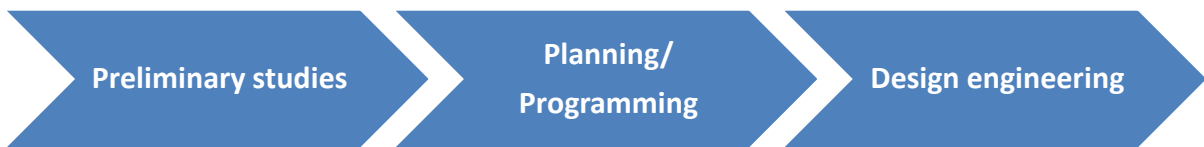
**Timeline: [When?]**

The issues defined above are now to be discussed **for each stage of urban project**. To do so, 6 stages have been considered for urban projects as shown below:



The three first stages (orange) correspond to the preliminary planning process (before any construction) whereas the last three? stages (blue) consider the life-cycle steps of the urban project.

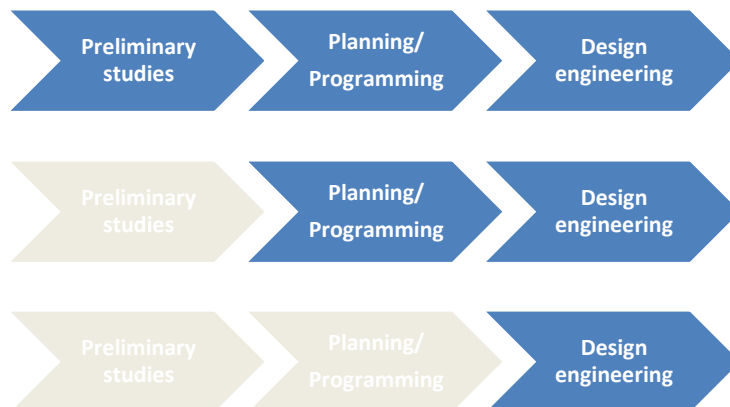
**1. First, you have to tick when the tool or instrument considers the item for the first time**



- **Preliminary studies:** All studies carried out before knowing what is going to be done on the field
- **Planning/Programming:** First ambitions, budget, uses, feasibility
- **Design Engineering:** Precise plans, technics used, construction organization

If the issue is considered in step 1 (preliminary studies), it is then automatically assumed that it will also be considered in the step 2 and 3 since they follow step 1 in time.

Therefore, **these are the only options** (orange = ticked, grey = not ticked):



2. Secondly, you have to score from 0 to 6 the influence exerted on the item for each part:

Construction site and end-of-life project (recycling/ deconstructing)

Operating/ Using

**Construction site and end-of-life project (recycling /deconstructing):**

- Does the instrument/tool influence the item during the **construction site** phase (public works period only)?
- Does the instrument/tool influence the item during the **end-of-life urban project** (once it has to be demolished/deconstructed : reusing, recycling or upcycling)?
- Does it take into account the impacts of the **deconstruction site** (public works period only)?

To do so, you will use this scoring scale:

0 = no consideration
1 = partial consideration of the item for the construction site
2 = good consideration of the item for the construction site
3 = good consideration of the item for the construction site and partial end-of-life project consideration
4 = good consideration of the item for the construction site and good end-of-life project consideration
5 = good consideration of the item for the construction site and good end-of-life project consideration and partial consideration for deconstruction site
6 = good consideration of the item for the construction site and good end-of-life project consideration and good consideration for deconstruction site

**Operating/using (performance + use):** does the instrument/tool influence the item concerning the performance of the urban project (operating)? Does it also take the uses and consumptions after the construction into account (use)?

To do so, you will use this scoring scale:

0 = no consideration
1 = poor consideration of the item for the site performance
2 = partial consideration of the item for the site performance
3 = good consideration of the item for the site performance
4 = partial consideration of the item for the site performance and partial uses consideration
5 = good consideration of the item for the site performance and partial uses consideration
6 = good consideration of the item for the site performance and good uses consideration

Contrary to step 1., there is no relation in time between these two parts.

### 2.3. Further information

Once you have scored each issue, a few final questions:

- Reporting :

*Does the tool or instrument intend to report data or objectives? YES/ NO*

*If yes, how is the reporting realized? (Results, outputs, indicators, frequency, transparency)*

- Use

Do you find the tool/instrument:

Accessible?

*Is it translated to english/ free / available on the internet / on demand / paying service / restricted use?*

Easily understandable?

*Is the instrument/tool intended to be used by experts, professionals, informed / general public?*

Popular or frequently invoked/used?

Well-known?

- And finally preliminary thinking about strengths, weaknesses and opportunities is required.

*At first sight, what can you say about the instrument/tool regarding SWOT analysis? No need of a complete analysis, these first ideas will be detailed in the next step of WP3.*



Cooling	Yes	Yes	Yes
Electricity	Yes	Yes	Yes
<b>2. Part of the energy system</b>			
Energy generation	Yes	Yes	Yes
Energy distribution			
Energy consumption	Yes	Yes	Yes
Energy embedded			
<b>3. Kind of energy source</b>			
Renewable energy sources	Yes	Yes	Yes
Non-Renewable energy sources	Yes	Yes	Yes
<b>4. Building structure</b>			
Building stock (refurbishment)	Yes	Yes	Yes
New buildings	Yes	Yes	Yes
<b>5. Further considered issues</b>			
Governance			
Water	Yes	Yes	Yes
Waste	Yes	Yes	Yes
Environmental protection	Yes	Yes	Yes
Mitigation (GHG emissions reduction)	Yes	Yes	Yes
Adaptation to climate change	Yes	Yes	Yes
Social	Yes	Yes	Yes
Economy			
Comments			

Does the instrument/tool influence energy integration in the construction site ? No	Does the instrument/tool influence energy integration in the project's end-life ? No	Does the instrument/tool influence consumption during using phase ? Yes
----------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------	----------------------------------------------------------------------------

### Assessment of the usage/usability

Score from 1 to 5		
<b>Do you find the tool/instrument accessible?</b> Score from 1 (not accessible) to 5 (full accessible)	<b>Easily understandable? For tools: Easily useable?</b> Score from 1 (not understandable/useable) to 5 (full understandable/useable)	<b>Is this instrument/tool well-known?</b> Score from 1 (not known) to 5 (very well-known): Very well-known (5) / well-known (4) / medium known (3) / less known (2) / nobody knows it (1)
5 Translated / free / available on the internet	3 professional / informed public	4

<b>Does the target stakeholders intensively use this instrument/tool?</b> Score from 1 (not used) to 5 (very intensively used): Very intensively (part of daily activities or important decisions) (5) / intensively (4) / sometimes (3) / rarely (2) / not used (1)
4

### Preliminary thinking

<b>Strenghts</b>	<b>Weaknesses</b>	<b>Opportunities</b>
The Plan is integrated in all policies of the city ambitious objectives key document experienced since 2007	Partly mandatory	
<b>Need for adaptation of this tool/instrument?</b> Score from 1 (no adaptation) to 5 (high need for adaptation)	<b>Is there a need for new tool/instrument additional to or in exchange for this tool/instrument?</b>	
2	No	