

CESBA Booklet Preface

The CESBA Booklet is a joint output of the projects Interreg Alpine Space CESBA Alps, Interreg Alpine Space CESBA MED, Interreg Alpine Space GREENCYCLE, Interreg Alpine Space PEACE_Alps, Interreg Alpine Space THE 4 BEES, Interreg Alpine Space CaSCo, Interreg Alpine Space Greta, Interreg Alpine Space IMEAS and New TREND.

The co-operation enables a more thorough engagement of bodies, associations, networks and institutes as to the booklet contribution and it facilitates the dissemination of this common result in the Mediterranean area and in the Alpine Space. One major step forward for this booklet was the common 4th CESBA Sprint Workshop held in Vorarlberg in September 2017 which was organised by CESBA Alps with expert contributions of other European projects. In the joint 4th CESBA Sprint Workshop, the results up to then from all projects were discussed and further developed among 90 experts in six thematic sessions.

The key target of the CESBA initiative is to develop a common European assessment framework for the present and future built environment – from buildings to the territories.

The goals are

- Improve the quality of life for inhabitants and minimize negative impacts on climate and resources
- Disseminate CESBA Key Performance indicators (KPIs) and CESBA framework
- Collect and gather knowledge and experts working on this field (best practices, establishing a state of the art, getting an overview of tools used and goals as well as actions set)
- Improve the quality and usability of current processes and create a network of shared knowledge.

CESBA builds up on several finalized European projects such as ENERBUILD, IRH-med, OPENHOUSE, SuPerBuildings, CEC5 and CABEE, Visible, etc. and the CESBA guide, launched in 2014. The process and ongoing results are published in the CESBA Wiki (available at www.cesba.eu¹) which acts as a public knowledge hub.

This CESBA booklet 2018 is the result of the latest discussions held during the 4th CESBA Sprint Workshop 2017, finalized in the project CESBA Alps and CESBA MED.

^{1 &}lt;u>www.cesba.eu</u> developed in the CABEE project as a common know-how exchange platform, continuous improvements VISIBLE Project, CABEE Project, CEC5, CESBA ALPS, GREENCYCLE and CESBA Med

Main Authors

Andrea Moro (iiSBE Italia, Project New Trend)

Desiree Bua (CSI Piemonte, Project The4Bees)

Etienne Viénot (Auvergne-Rhône-Alpes Energie Environnement, Projects CESBA MED & CESBA Alps)

Johannes Steidl (Hochschule für angewandte Wissenschaften München)

Judith Cazas (Envirobat BDM, Project CESBA MED)

Katrin Jurisch (Climate Alliance, Projects Peace Alps & Greta)

Klemen Bizjak (Municipality of Maribor, Project Greencycle)

Markus Berchtold-Domig (CESBA, Project CESBA Alps)

Michael Schimek (Welterbegemeinden Wachau, Project CESBA Alps)

Philipp Strohmeier (Holz von Hier, Project CaSCO)

René Lohe (B&SU Berlin)

Sabine Erber (Energieinstitut Vorarlberg, Project IMEAS)

Valeria Ferrando (IES, Project NewTREND)

Based on the results developed in the CESBA Sprint Workshop Sessions, moderated by:

Main moderation: Markus Berchtold-Domig (CESBA) & Verena Konrad (vai- Vorarlberger Architektur Institut)

Team 1, Territorial and Municipal Development. Assessment, Planning, Mapping, Monitoring: Katrin Jurisch (Climate Alliance, Projects Peace Alps & Greta), Johannes Steidl (Hochschule für angewandte Wissenschaften München, Project CESBA Alps)

Team2, Neighborhood and District Scale. Assessment Systems Harmonization: Andrea Moro (iiSBE Italia, Project New Trend), Judith Cazas (Envirobat BDM, Project CESBA MED)

Team 3, User Behaviour, New technologies, Low Tech Approach, Public participation: Desiree Bua (CSI Piemonte, Project The4Bees), Sabine Erber (Energieinstitut Vorarlberg, Project IMEAS)

Team 4, Methods. Assessment Systems and Public Policies. Incentives, Building codes, Urban Plans: Valeria Ferrando (IES, Project NewTREND), Michael Schimek (Welterbegemeinden Wachau, Project CESBA Alps)

Team 5, Circular economy, local Resources, Waste and Materials. Green Public Procurement, Legal implementation: Philipp Strohmeier (Holz von Hier, Project CaSCo), Klemen Bizjak (Municipality of Maribor, Project Greencycle)

Team 6, CESBA Movement, EU-framework, Innovation, Projects: Etienne Viénot (Auvergne-Rhône-Alpes Energie Environnement, Project CESBA MED & CESBA Alps), , René Lohe (B&SU Berlin)

Participants:

Andreatta Sebastiano / Bacan Ivan / Bahl Erwin / Balaras Costas / Bas Juan Antonio / Bazzan Elena / Bauregard Stephanie / Bazzan Elena / Berchtold-Domig Markus / Biard Patrick / Bischof Stefanie / Bizjak Klemen / Böhmwalder Manfred / Borg Ruben Paul / Borgaro Paola /Böttcher Fabian / Braun Michael / Breitfeld Maike / Bruckner Gabriele / Bua Desiree / Calzavara Alessandro / Cazas Judith / Chanussot Laurent / Chiapparini Claudio / Combetto Marco / Cosmi Lisa / Cvenkel Helena / Dallape Lorenzo / De Zorzi Silvano / Droutsa Popi / Erber Sabine / Erlih Sasah / Espanol Usón Eva / Ferrando Valeria / Feurstein Bernadette / Feurstein Ines / Galeasso Luca / Gambino Silvana / Gmeiner Harald / Haas Christine / Hilleret Anne / Jazbec Eva / Jurisch Katrin / Konrad Verena / Kosmac Jarc Mateja / Kress Andreas / Küchler Willy / Lay Anne-Séverine / Lenz Dietmar / Leval Cyrielle / L'Haoua Mustapha / Loffredo Silvia / Lohe Réné / Malinovex Pucek Marina / Martizez Victor / Mazza Liliana / Mazzeschi Alessandro / Mittermeier Paul / Moro Andrea / Nazio Patrizia / Palazzoli Carlo / Parolin Andrea / Perin Claudio / Peternel Petra / Premat Catherine / Presotto Agnese / Raynal Gabrielle / Riba Gerard Rüf Franz / Schaefer Jean-Pascal / Scheibler Matyas / Schimek Michael / Sposato Emanuela / Stampfl Paul / Steidl Johannes-Peter / Steurer Peter / Strohmeier Philipp / Szerb Peter / Thonier Gregoire / Toscano Ileana / Tramberend Peter / Ulrich-Schneider Aurelia / Vienot Etienne / Wirthensohn Hugo

Patronage:

CESBA SPRINT WORKSHOP under the patronage of: Deputy State Governor of Vorarlberg Mag. Karlheinz Rüdisser, State Councillor for energy & climate protection Ing. Erich Schwärzler, Member of the provincial parliament Martina Rüscher MBA Msc

Edited by:

Markus Berchtold-Domig

Design by:

Ines Feurstein

Photos by:

Ines Feurstein

Copyright © CESBA Alps

Designed and published by the CESBA Alps project

Contributing projects:





















Main organizing project:



TAB	LE OF CO	ONTENTSCESBA BOOKLET PREFACE	2
MAI	N AUTHO	DRS	3
TAB	LE OF C	ONTENTS	5
1	CESBA	'S VISION, ATTITUDE AND FINAL STATEMENTS OF THE SPRINT WORKSHOPS	8
	1.1	CESBA – PROCESS FOLLOWS 9 PRINCIPLES	8
	1.2	CESBA SPRINT WORKSHOP FINAL AGREEMENT 2013	9
	1.3	CESBA SPRINT WORKSHOP FINAL AGREEMENT 2014	. 10
	1.4	CESBA SPRINT WORKSHOP FINAL AGREEMENT 2017	. 11
2		ORIAL AND MUNICIPAL DEVELOPMENT. ASSESSMENT, PLANNING, MAPPING A	
	2.1	KPIS - KEY PERFORMANCE INDICATORS	. 13
		C.2.4 Share of renewable energy on-site, on total primary energy consumptions	
	2.1.2	What innovations are necessary to use KPIs by politicians?	. 15
	2.1.3	What innovations are necessary to use KPIs by citizens?	. 17
	2.1.4	You work in a local authority - you want KPIs being used. What do you do?	. 17
	2.2	USES OF KPIs	. 18
	2.2.1	Model	. 18
	2.2.2	Feedback	. 18
	2.2.3	Demonstrate (show that it works)	. 18
	2.2.4	Training	. 18
	2.2.5	Organization of work	. 19
	2.2.6	Management	. 19
	2.2.7	Challenges	. 19
	2.3	HOW CAN LOCAL AUTHORITIES MAKE USE OF KPIS IN THEIR DAILY WORK TO ENHANGE SUSTAINABLE DEVELOPMENT?	
3	NEIGHE	BORHOOD AND DISTRICT SCALE: HARMONIZATION OF THE ASSESSMENT SYSTE	
	3.1	WHAT COULD BE THE BEST STRATEGY TO HARMONIZE THE EXISTING AND FUTURE SUSTAINABII ASSESSMENT SYSTEMS FOR THE BUILT ENVIRONMENT?	
	3.2	GENERIC FRAMEWORK EVOLUTION PROPOSITION	. 22
	3.3	WHAT ARE THE BENEFITS OF A PARTICIPATORY CERTIFICATION PROCESS?	. 22
	3.4	WHAT SHOULD BE THE COMMON KEY PERFORMANCE INDICATORS TO INCLUDE IN THE EUROPI PASSPORT FOR THE BUILT ENVIRONMENT? HOW TO APPLY THE EU LEVELS SYSTEM?	

	3.5	WHAT SHOULD BE THE CRITERIA FOR THE CESBA SUSTAINABLE NEIGHBORHOOD AWARD? H TO EVALUATE SUBMISSIONS FOR THE AWARD?	
	3.6	AWARD CONTENT	. 24
	3.7	KEY STATEMENT / MAIN MESSAGE	. 25
4	USER E	BEHAVIOR, NEW TECHNOLOGIES, LOW TECH APPROACH, PUBLIC PARTICIPATION.	26
	4.1	WHAT PROBLEMS DO USERS HAVE IN YOUR REGIONS AND ARE TECHNICAL SOLUTIONS PART THE PROBLEM OR A SOLUTION?	
	4.2	HOW CAN WE COPE WITH THE GAP OF KNOWLEDGE, ADAPTABILITY AND INNOVATIO	
	4.2.1	Participatory tools	. 27
	4.2.2	User / human factor:	. 27
	4.3	WILL WE REACH THE AMBITIOUS GOALS ON LOW CARBON EMISSIONS WITHOUT A SUPPORTUSER? HOW CAN BEHAVIORAL CHANGES BE MEASURED?	
	4.3.1	Greenhouse gas (GHG) emissions	. 28
	4.4	HOW CAN WE MOTIVATE USERS, PRIVATE CITIZENS TO SUPPORT SUSTAINABLE DEVELOPMENT THE BUILT ENVIRONMENT?	
	4.5	HOW TO OVERCOME BARRIERS AND CREATE OPPORTUNITIES FOR USER INVOLVEMENT?	. 31
5		DS, ASSESSMENT SYSTEMS AND PUBLIC POLICIES. INCENTIVES, BUILDING COL	
	5.1	INNOVATIVE POLICIES AND PLANNING ACTIVITIES IN EUROPE	. 33
	5.2	How to make policies effective?	. 35
	5.3	WHAT ARE THE NEEDS FOR IMPROVEMENT OF ASSESSMENT SYSTEMS? WHAT ARE BEST PRACE EXAMPLES / IDEAS?	
	5.4	How to promote and facilitate the use and implementation of assessment tools public policies, public incentives, building codes, green public procurements a urban plans?	AND
	5.5	WHY TO WORK ON A TRANSNATIONAL HARMONIZATION?	. 38
6		AR ECONOMY, LOCAL RESOURCES, WASTE AND MATERIALS. GREEN PUB	
	6.1	What can we learn from wood as an example for economic growth and circu economy?	
	6.2	WHERE ARE THE VARIOUS BORDERS FOR CIRCULAR ECONOMY? WHAT COULD BE TRANSNATIONAL HELP?	
	6.3	How to integrate KPIs for sustainable development (divided in Process Qualitie Social Qualities / Economical Qualities / Ecological Qualities / Capacity to act Green public procurement?) IN
	6.4	WHAT ARE THE MAIN ISSUES FOR A CIRCULAR ECONOMY MANIFESTO?	. 48

7	CESBA	MOVEMENT, EU- FRAMEWORK INNOVATION, AND PROJECTS 49
	7.1	What are the weaknesses, what are the strengths of CESBA? What are necessary changes?
	7.2	WHO ARE PARTNERS OF CESBA, WHAT IS THEIR CONTRIBUTION, HOW CAN THEY BENEFIT, HOW TO INTEGRATE THEM?
	7.3	WHO ARE PARTNERS OF CESBA, WHAT IS THEIR CONTRIBUTION, HOW CAN THEY BENEFIT, AND HOW TO INTEGRATE THEM?
	7.4	WHAT CHANNELS SHOULD BE USED TO INCREASE THE KNOWLEDGE ABOUT CESBA? HOW CAN CESBA INTERACT WITH ITS TARGET GROUPS?
	7.5	HOW CAN CESBA GAIN POLITICAL STRENGTH? WHAT IS THE POSITION OF CESBA IN THE EUROPEAN, NATIONAL, OR AT LOCAL PERSPECTIVE?
	7.6	IDEAS, KEY WORDS FOR FURTHER THOUGHTS ON CESBA

1 CESBA's Vision, attitude and final statements of the Sprint Workshops

- CESBA is a collective European bottom-up initiative that provides knowledge on harmonized built environment assessment.
- CESBA's mission is to facilitate diffusion and adoption of sustainable built environment principles using harmonized assessment systems in the whole life cycle of the built environment.
- Therefore, CESBA wants to be Europe's leading organization for the harmonization of existing and future built environment assessment systems.
- CESBA sees the diversity of cultural backgrounds, technical fields of working and levels of power as opportunities to discuss and create best solutions for the built environment.
- CESBA focuses on and capitalizes European projects, offers European expertise on built
 environment assessment to the public in English and in the local languages in the target
 countries.
- CESBA disseminates best practices, improves existing methods and generates new practices.
- CESBA fosters the local economy while keeping the global perspective in mind. Competition
 and cooperation are valued equally. CESBA creates a pre-market environment for a new
 culture of built environment. CESBA supports cost savings and fosters the creation of valueadded benefits according to the goals of CESBA.
- CESBA encourages and promotes the use of traditional, locally available resources and products as an important driver for the local economy. By this, the built environment assessment scheme can create an added value to the aspects of sustainable development.

1.1 CESBA – PROCESS FOLLOWS 9 PRINCIPLES

The nine CESBA Principles applied in the project CESBA ALPS

User first!	Comparability	Open source
Sustainability	Mass-oriented	Co-creation
Regional	Simple to use	Transparency
	Regional contextualization	

1.2 CESBA SPRINT WORKSHOP FINAL AGREEMENT 2013

- CESBA a Collective Initiative for a new Culture of Built Environment in Europe.
- Together we enhance the quality of life by supporting the development of sustainable built environment.
- CESBA is in line with EU initiatives, adopts and promotes national and European processes and standards at building and settlement levels.
- CESBA is a bottom-up initiative, which supports the definition of qualities for the whole building life cycle.
- CESBA's mass approach and open source method reinforces local and regional accepted standards throughout the different macro regions.
- CESBA puts the human being in its center and is in dialogue with society.
- On regional and local levels, CESBA focuses on its implementation. On inter-regional level, CESBA focuses on the integration of the CESBA approach with the EU-institutions and EU-processes.
- CESBA offers harmonization among building regulations at EU and national levels leading to considerable simplification within administration procedures and creating a common understanding among the actors.
- CESBA researches and offers principles to assess building and built environment qualities.
- CESBA offers a set of key indicators and reference criteria that help to compare different building standards. The usability of current assessment processes will be improved by developing a common framework.
- CESBA encourages the building users to participate and take on responsibility for the used buildings.
- CESBA fosters common European education and training standards on key issues of the new building and built environment culture.
- CESBA is a non-profit initiative without financial interests.
- CESBA is online with its knowledge hub CESBA Wiki www.cesba.eu

1.3 CESBA SPRINT WORKSHOP FINAL AGREEMENT 2014

- Together we support the work done, summarized in the CESBA guide and the CESBA wiki.
- CESBA sees the diversity of cultural backgrounds, technical fields of working and levels of power as opportunities to discuss and create best solutions for the built environment.
- CESBA capitalizes on European projects, offers European knowledge on built environment assessment to the public in English and in local languages. CESBA disseminates best practices, improves existing methods and generates new practices.
- CESBA fosters local economy while keeping the global perspective in mind. Competition and cooperation are valued equally. CESBA creates a pre-market environment for a new culture of built environment. CESBA supports cost savings and fosters the creation of value-added benefits according to the goals of CESBA.
- CESBA encourages and promotes the use of traditional, locally available resources and
 products as an important factor driver for local economy. By this, the built environment
 assessment scheme can create an added value to the aspects of sustainable development. It
 should integrate external costs of the processes and materials.
- CESBA supports coordinated actions in the field of built environment, fosters transnational cooperation and supports new common project activities.
- CESBA has different levels of commitment: CESBA Experts and CESBA Ambassadors are named in the CESBA Wiki. CESBA Editors continuously write on the CESBA Wiki and CESBA Experts keep it updated.
- From today on an open thematic group on harmonization of assessment methods and systems for buildings shall work under the umbrella of CESBA. Other thematic groups will follow. CESBA supports thematic groups over different EU-projects.
- CESBA Wiki is the core of the knowledge hub. CESBA acts as a communication and action
 platform for its actors. CESBA actively communicates the news and main results in the field
 of the sustainable built environment in Europe. New social media and real time
 communication media are used.
- CESBA is an ongoing process. CESBA will be strengthened within the upcoming years, through CESBA workshops, CESBA thematic groups, and common new projects.

1.4 CESBA SPRINT WORKSHOP FINAL AGREEMENT 2017

Together we build on the previous work done in CESBA. This includes the nine CESBA principles, the Final Agreements of 2013 and 2014.

On CESBA:

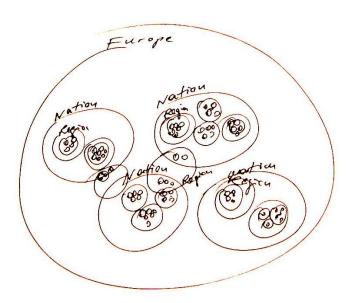
- CESBA shall promote and facilitate the use and implementation of community based assessment tools, participative guarantee system in public policies, public incentives, green public procurements and spatial developments.
- Key elements of harmonizing assessment schemes are "Spatial Scale (building, neighborhood, city, territory)", Time-Scale, vs "PSC-Principles (Process Qualities, Sustainability Qualities, Capacity to act)".
- CESBA gains political strength by creating tangible results focused on user groups as a base for further communication.
- CESBA see itself in the framework of circular economy. Circular public procurement has to be planned.
- Main partners / target groups and channels of communication for CESBA are professionals, owners of assessment tools, and public authorities which will be addressed with a multilevel communication approach (on- and offline). A communication concept will be developed.
- CESBA takes into account various local context and helps each community to do its best regarding its economic, social, environmental and cultural positions.
- Transnational partnerships help to develop a common language and understanding of good European practice. Best practices show progress and innovation to local authorities and users.
- CESBA has gained a lot of content, methods and connections. CESBA has to capitalize and to go a next step in business development and strategic communication. CESBA has to adapt its communication design to lower entrance barriers for more participation.
- Next steps for CESBA are task forces dealing with:
 - 1. Harmonization of assessment systems
 - 2. Business models for the capitalization of CESBA-Results / Business models on financing schemes for CESBA
 - 3. Roll out and communication strategy
- A CESBA award for sustainable neighborhoods based on KPIs shall be established on European level in collaboration with other networks.
- The series of CESBA Sprint Workshops shall continue. The next CESBA Sprint Workshop shall take place in Malta from 7th-9t^h of November 2018.

On assessment systems:

- CESBA supports transnational KPIs, reaching from buildings to neighborhoods to municipalities
 to territories to administrative regions to nations to Europe. KPIs are suitable to share
 objectives, to connect local actions to wider goals and programs. KPIs help to visualize the
 progress and make impact visible. KPIs help to learn, compare, monitor, assess progress and
 exemplify best practices. KPIs are user oriented. KPIs guide green public procurement, public
 incentives and policies.
- CESBA supports transnational generic frameworks for the development of local harmonized assessment tools.

On Policy:

- The implementation of assessment tools in public policies are limited by the risks of too high complexity, restrictions, and costs. Assessment tools in public policies shall be open and encourage new ideas to meet the need. Assessments are essential instruments to gain a good building culture and a better-built environment.
- CESBA supports the evaluation of effectiveness and quality of local policies and processes in terms of participation and governance (capacity to act).
- CESBA supports implementation, monitoring and evaluation of policies.
- The involvement of users is the base. The drivers for user involvement are awareness raising, services, incentives, and legislation.



2 Territorial and Municipal Development. Assessment, Planning, Mapping and Monitoring.

Our approach is a holistic approach to generating indicators for a whole region. The challenge is to reach out to the different levels of municipalities and regions. Nevertheless, this can also be regarded as the solution of having switching levels. To give an example: when working on CO_2 emission with regional indicators - the regional indicator includes all the emissions of all the buildings on the territory. Here it is not possible to see the influence actions on regional level emissions. There the need arises to define "what is the capacity to act of a municipality". This example underlines the importance of having regional indicators and at the same time knowing the municipality's capacity to act.

The table below shows the different levels from the scale of buildings to the European region. Within these levels KPIs can be categorized, tested and the KPIs influence within these categories can be shown.

	Building	Neighborhood	Municipality	Region	State	Europe
			Terri	tory		
Monitoring						
Governance						
Planning						
Incentives						
Training						

2.1 KPIS – KEY PERFORMANCE INDICATORS

KPI example:

2.1.1 C.2.4 SHARE OF RENEWABLE ENERGY ON-SITE, ON TOTAL PRIMARY ENERGY CONSUMPTIONS FOR BUILDINGS OPERATION

1. Intent:

To incentive the consumption and production of renewable energy.

2. Assessment methodology

2.1 Description

The criterion al assesses the share of renewable energy in primary energy consumptions and, by implication, the degree to which renewable fuels have substituted fossil and/or nuclear fuels

and therefore contributed to the decarbonisation of the Mediterranean area economy. It also shows what is the progress towards Europe 2020 target for renewable energies.

2.2 Data requirement

Indicator	Unit	Data source
Aggregated total annual primary energy consumption from on-site renewable energy sources / aggregated total annual primary energy consumption	%	Estimation

2.3 Assessment method

To characterize the indicator's value:

- 1. In the calculation of the primary energy consumption, the following energy uses must be considered: heating, cooling, ventilation, auxiliaries, domestic hot water and lighting.
- 2. For each building in the local area, calculate the annual final (thermal and electric) energy consumption per energy carrier in kilowatt hours (kWh/year)
- 3. Sum the annual final energy consumption of each building up to an aggregated annual final energy consumption per energy carrier (kWh/year).
- 4. Using the national conversion factors, convert the aggregated annual final energy consumption per energy carrier in annual primary energy consumption per energy carrier (kWh/year).
- 5. Sum the annual primary energy consumption per energy carrier up to an aggregated annual total primary energy consumption (kWh/year).
- 6. For each building in the local area, calculate the annual final (thermal and electric) energy consumption per on-site renewable energy source in kilowatt hours (kWh/year) i.e. P.V, solar thermal panels, etc.
- 7. Sum the annual final energy consumption from on-site renewable energy sources of each building up to an aggregated annual final energy consumption per on-site renewable energy source (kWh/year).
- 8. Using the national conversion factors, convert the aggregated annual final energy consumption per on-site renewable energy source in annual primary energy consumption per on-site renewable energy source (kWh/year).
- 9. Sum the annual primary energy consumption per on-site renewable energy source up to an aggregated annual total primary energy consumption from on-site renewable energy sources (kWh/year).
- 10. Calculate the indicator's value as: aggregated total annual primary energy consumption from on-site renewable energy sources / aggregated total annual primary energy consumption.

Note

Calculations are based on EN 13790 using the quasi-steady state monthly method.

Exported energy is the one delivered by technical systems through the system boundary (urban area) and used outside the system boundary. Exported energy is a benefit beyond the system boundary and it has not to be included in the calculation.

3. References and standards

EN 13790 (Energy performance of buildings. Calculation of energy use for space heating and cooling).

KPIS – Key Performance Indicators is a framework of indicators and common metrics for measuring the sustainability of the built environment at building, urban and territorial scale.

Although KPIs are a very complex system, they have to be user oriented, simple and user friendly. This is the premise to manage complexity and simplification.

KPIs are suitable to share objectives on different NUTS levels (Nomenclature of Territorial Units for Statistics as the basic classification for regional data in the EU). NUTS levels cluster the European areas into different Socio-economic analyses of the regions: NUTS 1 (major socio-economic regions), NUTS 2 (basic regions for the application of regional policies) and NUTS 3 (small regions for specific diagnoses).

- KPIs connect local action to wider goals and make an impact visible
- KPIs help to visualize the progress and to show the process of an improvement of different criteria
- KPIs help to learn, compare and compete
- Unassessed KPIs show lacks.
- KPIs are indicators shared with all countries
- KPIs are a working tool that enables to switch from one level of complexity into another.
- The passport is a set of KPIs that describes a region as far as it is possible. A passport program will be tested for the first time
- KPI have to be comparable

2.1.2 WHAT INNOVATIONS ARE NECESSARY TO USE KPIS BY POLITICIANS?

- Territorial Pride Competition
- Solve rapidly the issues
- To show then aggregating different political competences and power you reach bigger and effective + RESULTS
- Program to generate founding
- Decision making

- Subsidies based on KPIs → INCENTIVES → Links between Actions and KPI →
 AWARENESS/TRANSPARENCY → to speak the same language to understand effects
- Links between KPI and their priorities
- KPI integration in local planning tools to educate p... choices
- Learn to value the territorial transformations in terms of KPI
- Integration of KPI in evaluation of land value €/\$
- Simple indicator
- KIPs units (what everybody can apply)
- Units of KPIs should measure quality value quantity
- Accept the fact that the use of KPI make choices more transparent (maybe a problem)

2.1.3 WHAT INNOVATIONS ARE NECESSARY TO USE KPIS BY CITIZENS?

Involvement: Communication tailored to different target groups

- KPIs are translated into standard / easy to understand units
- KPIs can be used for the assessment of buildings and lifestyles
- To realize contribution in a collective perspective
- Fun street events (e.g. mobility week, energy week)
- Make KPI fun
- Annual public KPI revue
- Involve schools
- Citizen competitions
- A transparent and well monitored panel of KPIs to consult citizens for free
- Development of an CESBA-APP with KPIs (gamification)
- Mass media communication
- Inform in detail about the advantages
- KPIs should cover health implications and touch people
- See directly the politicians' choices
- simplify understanding
- To speak the same language to different ways to understand effects
- Citizens can judge the work of politicians because they can measure their effects
- Learn to evaluate the territorial transformations in terms of KPI

2.1.4 YOU WORK IN A LOCAL AUTHORITY - YOU WANT KPIS BEING USED. WHAT DO YOU DO?

To encourage local authorities to apply KPIs, it is recommended to organize trainings or workshops as well as to offer easy access to the data in order to motivate the people.

The first step is the training. The team needs to understand the function of KPIs and how to use them in their activities in order to see that these KPIs are the basis for communication among regions.

The next step is to manage a workflow to make sure that the data is collected for the proper KPIs, taking into account that the data is not too expensive to make sure that they are available in times when there is scarcity of money.

It is important to think in very simple KPIs. KPIs should be readable without scientific background.

After managing the work flow, the team needs to be motivated. This ensures the ongoing quality of KPIs and the continuity.

Finally, there should be campaigns showing and demonstrating the strength of KPIs and how they work in practice.

The formula for long-term success of the KPIs is to stay short and simple.

2.2 USES OF KPIS

2.2.1 MODEL

- Address and monitor local policy (VAS/VINCA/EVAL. PROGRAMM)
- "I use KPI in my activity"

2.2.2 FEEDBACK

- Feedback work flow
- I give feedback, perceive the progress, usability
 - A. Involvement:
 - Planning
 - Monitoring
 - Communication

2.2.3 DEMONSTRATE (SHOW THAT IT WORKS)

- Show the strength of KPIs to the staff
- "I will show the positive effects of the USP of KPIs"

2.2.4 TRAINING

- Organize training: kickoff; regular seminars
- Explain KPI to the staff
- Convince staff about the benefits of key performance indicators in a practical workshop

- Organize an annual KPI revue by the persons responsible of the calculation
- Help colleagues to use KPI
- "I calculate KPI for my colleague"

2.2.5 ORGANIZATION OF WORK

- Manage easy access to data for KPIs
- "I ensure the persons get the data needed"

2.2.6 MANAGEMENT

Decision makers ask for KPIs

2.2.7 CHALLENGES

- "I create a project challenge for a specific KPI to keep persons engaged"
- set up a competition between services concerning the progress toward the KPI goals

2.3 HOW CAN LOCAL AUTHORITIES MAKE USE OF KPIS IN THEIR DAILY WORK TO ENHANCE SUSTAINABLE DEVELOPMENT?

- Integrate the awareness of policy makers (where are we going? Are we acting in the same direction?)
- Make a link between my daily work and higher objectives
- Verify impact of actions
- When heard to take a decision (part of ADSS)
- Communication to "attract" new citizens, new industries
- Assessment of sectoral policies (plans & programs)
- Cooperation for a rational doing LOCAL CONNECTING GLOBAL
- Holistic approach needs holistic policies and then improve L.A. actions
- Identify L.A. who are better than me (to take good ideas)
- Define goal / target
- Mapping (possibility and criteria)

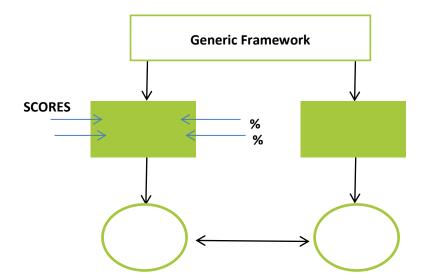
- Choose good actions
- Help sustainable businesses
- Find the weakness and strengths of the local authorities
- Local authorities show the progress of their work
- Part of decision-making process
- Tool to make policies visible and only for the decision-makers, but for citizens as well
- Measure the target value of sustainability
- Policy goals contextualized in territory
- Track progress
- Frame a process
- Local authorities will learn from KPIs
- Make progress visible
- Derive measures of change
- Comparison and competition with others: "I want to be the best"
- Challenge compare to similar LA
- To access to some kind of incentives
- To learn e.g. from other municipalities with better KPI values: "I am part of the world, what is my contribution in the collective effort?"
- Create a local and transnational exchange

3 Neighborhood and District Scale: Harmonization of the Assessment Systems

3.1 WHAT COULD BE THE BEST STRATEGY TO HARMONIZE THE EXISTING AND FUTURE SUSTAINABILITY ASSESSMENT SYSTEMS FOR THE BUILT ENVIRONMENT?

The priority is put on solving the technical issues and the harmonization of assessment systems of building, urban, and territorial scale in Europe.

The generic framework is a generic multi-criteria system that can generate the local tools through a contextualization process. This is a way to have local assessment tools producing compatible and comparable results, preserving the possibility to reflect the local priorities. The urban scale generic framework that is composed by more than 150 assessment criteria indicators is a framework organizing several different topics dealing with the environment, the society or the economy.



3.2 GENERIC FRAMEWORK EVOLUTION PROPOSITION

As a first category, climate change can be cited, as this grand challenge is considered very important.

Another category is time scale and case comparability. The users of the system are basically targeted to the decision makers of the municipalities, the ones that will decide what to do in the neighborhood. There are also technical users such as the urban planners that will calculate the value of the indicators, which create the profile of the urban areas.

Tools can be used on a time scale that measure the upper performance of a human area, identifying possible scenarios for the retrofit, using the system to choose the best one of these scenarios by using quantitative indicators. There are local tools based on the same methodology, which offer the possibility to compare performances of neighborhoods in different cities in Europe.

Another category to be included is equity and fair planning as well as the LEVELS approach. To share the same indicator and to indicate different assessment methods the LEVELS approach (see document LEVELS produced by European Commission of publishing, http://ec.europa.eu/environment/eussd/buildings.htm#toolkit) supports in the calculation of indicators and facilitates the use of the assessment tool by all.

Another important issue is communication. Not only the content (= the generic framework) is of importance - equally important is the way in which results of an assessment are communicated to the wider public. The translation of the technocratic generic framework into understandable language is needed. Visualization can help to support the message.

3.3 WHAT ARE THE BENEFITS OF A PARTICIPATORY CERTIFICATION PROCESS?

The benefits and the added value of a participatory certification process are sharing experience; peer review objectivity; the chance of networking (raising knowledge); obtaining useful advice during the design phase and lifetime usage, instead of having a black box of assessments; being local and close to projects; the chance to have contextualized assessment and review; using a transparent process and it is a complementary approach to the classical technical assessment and performance indicators.

3.4 WHAT SHOULD BE THE COMMON KEY PERFORMANCE INDICATORS TO INCLUDE IN THE EUROPEAN PASSPORT FOR THE BUILT ENVIRONMENT? HOW TO APPLY THE EU LEVELS SYSTEM?

The selection of KPIs is somewhat complex. KPIs must focus on the transnational level (not local) to compare and share best practice among us.

Identified reference topics that are considered to be of interest for all regions in Europe. For the urban scale KPIs are:

- Primary energy consumption: the use of primary energy, the use of renewable energy, the reduction of the final energy consumptions, and local energy production
- GHG emissions (CO₂ emissions)
- Air pollution and quality
- Public alternative transportation: the impact of mobility
- Sustainable materials: the use of local materials, the efficient use of materials, and re-use of recycled materials
- Water consumption: potable water consumption
- Waste management: separation of waste and recycling
- Quality of facilities and services
- Community planning and participation
- Life cycle cost
- Land use: consumption and permeability

These important issues will be transferred into a list of indicators (matrix), generating a generic framework with more than 150 indicators, delivering a final proposition. In this way all the different topics can be placed with the right indicators.

The challenge is to find a common global understanding of how to explain KPIs and to harmonize them into different scales in order to be able to identify global sustainability goals.

The next step then will be to finalize the building scale list. A building scale list was already designed in the previous Sprint Workshop in Hochhäderich. After a comparison with the "LEVELS-System" of the EU, and together with a common proposition of KPIs for buildings, a new form of interaction will be necessary between all the different sets of indicators since want to integrate all the different scales of the built environment.

3.5 WHAT SHOULD BE THE CRITERIA FOR THE CESBA SUSTAINABLE NEIGHBORHOOD AWARD? HOW TO EVALUATE SUBMISSIONS FOR THE AWARD?

The goal of the sustainable neighborhood challenge, among others, is to collect best practices of sustainable neighborhoods as well as understanding / researching the state of the art by collecting and gathering knowledge from experts and people working on this field. Further disseminating the tools for the project and having a link to the MED city network as part of the CESBA network project, is another goal to achieve.

The applicants of the award are at first municipality that can present best practice (maybe supported by the urban planning firms that support them in master plans etc.) as well as private companies. The basic idea is to award best practices of sustainable neighborhoods in Europe; the neighborhood can be a retrofitted neighborhood or a new development.

The challenge of the award is to be attractive and different as there are already many other awards. Important issues are keeping it easy, simple and feasible, as well as sticking to the reality of projects through relevant not too demanding categories. The prize itself is another important issue. Private companies or donors/philanthropists could sponsor it. Linking the CESBA Neighborhood Award to existing prizes or awards, as well as the integration of partners from other associations, networks or programs like Covenant of Mayors, European professionals' associations, Energy Cities, FEDARENE, Smart Cities... could help to raise our visibility. How to integrate feedback of the inhabitants of the neighborhood is another important issue.

3.6 AWARD CONTENT

- Phases:
 - Phases of projects from design phase as well as from already made projects
 - New or retrofit projects
 - Size: as many projects as possible municipality projects as well as private projects
- → Comparability
 - Special constraints
 - Extra points from inhabitants' feedback and public vote
- Rating: do we want to have a rating based on the value, or do we want to have a minimum rate based on KPIs

3.7 KEY STATEMENT / MAIN MESSAGE

Discussion on the participative guarantee system and the participative approach – this is in line with the CESBA movement (user first!)

The generic framework principle: this approach is in line with the nine principles of CESBA, because it is able to reflect the local priorities of resources used.

The structure of the first generic framework at urban scale is a consolidated result that will be presented at the CESBA MED meeting in November 2017 in Sant Cugat.

The CESBA Sprint Workshop team identified the reference topic for the urban scale KPIs.

Levels of assessment system or framework of indicators of the EU: the team compared this framework with the CESBA KPI building scale (defined in the previous Sprint Workshops) and decided to updated the list.

The principles for the training system of CESBA (CESBA Alps and CESBA MED): CESBA will define a transnational training system that will be contextualized to the different regions. In future CESBA could offer trainings for building scale, urban scale and territorial scale.

The issue of communication is included in the new final agreement of the general assembly.

What is important: we have to better visualize and communicate what we do.

The proposition of TEAM 2 is to develop a strategic communication plan to optimize the use of results from projects, to raise the interest and motivate other organizations for the participation and the use of our services.

4 User Behavior, New technologies, Low Tech Approach, Public participation.

4.1 WHAT PROBLEMS DO USERS HAVE IN YOUR REGIONS AND ARE TECHNICAL SOLUTIONS PART OF THE PROBLEM OR A SOLUTION?

There are two categories: the users of buildings and the inhabitants of cities (which are users of administration and larger scale)

BUILDING		CITY		
too short lifetime	"The Human Factor"	Energy poverty		
	Habits	Top down approach		
	Fraud	Lack of investment		
	Right usage			
	Functionality			
	Culture			
	Misunderstanding			
Missing Reflection – Missing Awareness – Missing involvement				
		Communication: to		
		people/users; of added value		
		Develop empathy with		
		citizens/users		

One of the technical problems users have is that building services today have a too short lifetime: they are invented, get popular, discussed and already dis-invented again. This is a big problem for all people on this scale.

Furthermore, there are political issues like energy poverty (people who cannot afford energy), a top-down approach as well as a lack of investment.

Then there is the human factor engaged in the involvement of the users in some kind of activities. Difficulties could occur because of the unpredictable behavior of people, their cultural backgrounds, misunderstandings, and the wrong use of technology or functionality.

Another aspect is how to manage the misuse of technologies inside the buildings or cities e.g. misusage of heating, lightning, etc.

The civic engagement and the involvement of users is one of the most important criteria to establish some kind of trust and empathy.

4.2 HOW CAN WE COPE WITH THE GAP OF KNOWLEDGE, ADAPTABILITY AND INNOVATIONAL BEHAVIOR?

4.2.1 PARTICIPATORY TOOLS

The first step to take is a clear identification of the target groups. It is necessary and important to know their targets, their contents, the tools and the requirements.

The next step is to consider the different aspects of the developer (which questions need to be taken into account – tool related, user related or both tool and user related)

When starting the process of defining a tool, the premise is that a tool is needed. Then the needs of the users are defined - (we do not have to create or develop tools just to create or develop tools!)

The main characteristic of a useful tool are:

- it is simple to use
- it is intuitive
- it is easy
- it can be used at different levels
- it is kept in mind through the whole participation (availability of documents)
- participation from home is possible
- best practice, good examples

Another question that needs to be taken into account is the definition of a tool that works in different levels because the level of knowledge and the level of skills of the users diverge.

A clear identification of a tool that can be used at different levels is a prerequisite (e.g. like the tool developed in NEW TREND). Always taking into account that this depends on how much data and knowledge is available.

Throughout the participatory process, it is important to keep record of the topics and themes discussed in order to have all documents available.

To enable a wider field of participation, ways for citizens to engage themselves and participate from home need to be found. Otherwise the participatory processes will not succeed.

4.2.2 USER / HUMAN FACTOR:

Considering the human factor with focus on the users, it is important to have peer-to-peer communication as well as to have champions of things that work.

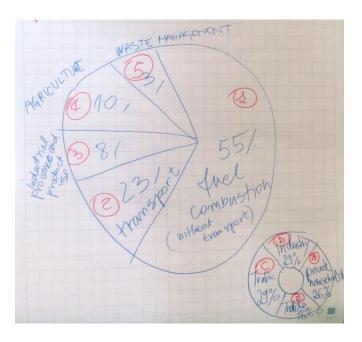
It is very important to take into consideration long term processes. Workshops and initiatives do not work, if there is nothing afterwards that creates a lasting effect (nudge / reward). Therefore, the living lab process could be a solution. Within this process, you keep the same audience.

Moreover, having facilitators – externals (not from public administration or involved users) is a key element for the success of projects.

- Clear identification of targets and adapting the message to the different targets is a very specific element worth underlining
- Clear identification of targets and requirements
- Traditional information systems
- Context specific issues
- 4.3 WILL WE REACH THE AMBITIOUS GOALS ON LOW CARBON EMISSIONS WITHOUT A SUPPORTIVE USER? HOW CAN BEHAVIORAL CHANGES BE MEASURED?

4.3.1 GREENHOUSE GAS (GHG) EMISSIONS

Households account for 20% of GHG emissions in the EU.



Based on the above pie chart distribution, three main causes for GHG emission can be identified:

- fuel for heating and electricity,
- traffic and
- industry (industrial emissions)

In the next step, these causes need to be refined in order to work with the panels.

Clustering users:

Private houses:

- Owners of buildings
- Tenants in general
- Low income tenants in private houses
- Low income tenants living in public residential buildings

Public administration (buildings):

- Students / teachers
- Hospital users and personnel

Mobility (traffic):

- Private transport
 - Transport to school
 - Transport to work: (P.T. Public; participating policies; sharing schemes →
 stakeholders / companies)
 - Women; teenager; workers; low income; ...

Company (productive sector):

- Trade
- Industry
- Handcrafters
- Workers
- Second-hand / used goods dealers

According to the groups of users identified, possible solutions need to be clustered. In order to better reach target users, KPIs are needed.

Suggestions / ideas for users of buildings:

- Flat prize for the energy consumed in household (flat prize means you choose one bracket of consumption that you have, within the bracket you can consume as much as you like if you go beyond that level, it will cost you much more). Somehow it is a top-down approach, but you still make the users learn how to be effective and it would be a simple solution to adopt. Consumption is reduced or rises within the financial limits in households.
- Bonus systems, financial incentives
- Legislation "no cars in city"
- Gamification
- Complementary:
 - Policy incentives
 - More aware user behaviour
- Buy energy and water efficient appliances
- Purchase green energy
- Create a circular economy marketplace based on offer and demand
- Good example and best practices especially public authorities

4.4 HOW CAN WE MOTIVATE USERS, PRIVATE CITIZENS TO SUPPORT SUSTAINABLE DEVELOPMENT OF THE BUILT ENVIRONMENT?

Motivation of users and private citizens in order to support sustainable development of the built environment will influence their habits and promote investment in renovation. In the table below how to influencing user habits through different motivational drivers is shown.

Motivational drivers are: Incentive systems (giving the carrot to the donkey), Legislation (giving the stick to the donkey), Awareness rising and services (services provided to change user habit). Regarding Social Empowerment, it is about what makes users feel better and having a kind of champion system to spread the message to the whole community.

USERS - INFLUENCE HABITS

Motivational Drivers

Awareness rising	Incentive system	Legislation	Services
Good example & best practices (e.g. public authorities)	Flat prize for amount of energy	Legislation "no cars in city"	Combined ticket P+R and public transport
campaigning	Bonus-systems "every day has 100 points"	Taxes for vehicles	Industry`s waste heat for heating district
Gamification -> poin	t system	Garbage selection	Residential ESCO
Communication		Free public transport, ticket compulsory for all students	
Educating the young	generation	Car selling bring ticket for public transport for 3 years	
		Free parking for shared cars	
		Lower taxes after renovation	
		Subsidy for energy efficient renovation (in a form of fund)	
		Construction volume on other place for renovation	

Ideas:

- "Energy detectives" at schools
- 100 families reduce CO2 footprints -> Venice
- Student home competition
- Biking competition city / company

4.5 HOW TO OVERCOME BARRIERS AND CREATE OPPORTUNITIES FOR USER INVOLVEMENT?

Main Message / Key statement:

The users are the problem and the solution at the same time!

User involvement by collecting as much feedback as possible from them is a key element.

Building trust is another important element. This means building a trustful two-way relationship: users towards public administration and public administration towards the users.

Trustful two-way relationship between public administration and users:

- have budget before the projects starts
- long-term involvement approach
- flexibility
- transparency
- co-responsibility
- PA should work to gain the trust of users
- Accountability
- Quick wins to demonstrate the approach works
- Continuous update and consultations (ongoing dialogue)
- New competences within the PA to facilitate the continuous dialogue
- Have a third neutral party as facilitator initially
- Users engagement
- Lay out clear rules for participation and roles
- acknowledgement of PA technicians: knowledge; expertise

User involvement means taking users' proposals and their ideas, it means user integration, call for participation and communication.

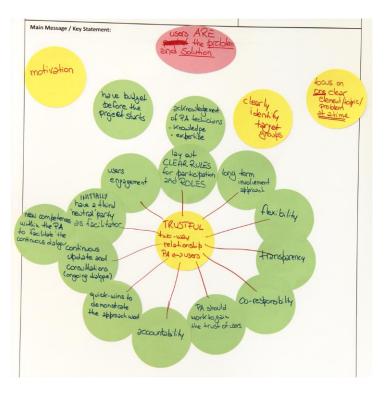
Motivation of users is another key element, besides the clear identification of target groups and the focus on one clear element / topic / problem at a time.

The overall motto should be: "start small and then grow from there!"

The linkage between user involvement, user motivation and KPI is more or less an expert view how to describe a region, to compare it and to measure performance. For example, involving users to turn down the fridge saves energy and this action in the end supports one indicator.

Therefore, the conclusion is that actors of a region or a municipality need to know which indicators a region wants to measure. Then there are different activities and actions that can contribute to the specific indicator (see picture "user flower" below!).

it is important for people in a region to know what the aim of a region / city / municipality to measure is. Then users / actors can contribute to a measurement.



5 Methods, Assessment Systems and Public Policies. Incentives, Building codes and Urban Plans.

5.1 INNOVATIVE POLICIES AND PLANNING ACTIVITIES IN EUROPE

To push ahead innovative policies and planning activities different issues are to be considered in the different European countries.

Common issues are:

- Engaging the citizens: Planning and policies cannot come from top-down; they have to involve citizens. A few initiatives are starting from that ground.
- The incentive part is very important. Economic benefits in policies make initiatives successful.
- Difference between local initiatives and big cities: At local level good examples of involving
 the local value chain exist already, e.g. policies give incentives if citizens achieve certain
 sustainability results by involving the local materials, local companies, and local enterprises –
 the whole value chain at local level. This is not possible at city scale. At city scale, other
 challenges are considered.
- To be more successful and effective, policies should follow some recommendations.
- An important thing is communication between sectoral plans.

Italy (Turin)

- Only brownfield
- Requalification
- Citizens
- Social innovation
- Involve community in the planning process
- Engaging people
- Define indicators at urban scale
- Local resources are difficult in big cities
- Aim preserve green spaces
- Rural territorial development agreement for Milano

France

- Sustainable energy and climate action plan mandatory for municipalities and air quality
- Reduce vulnerability of cities (i.e. heat island effect)
- Top-down approach
- Auvergne-Rhône-Alpes region: positive energy territory through using local resources and reducing energy consumption 2050; incl. mobility
- Urban + rural (bottom-up); involve citizens, engage stakeholders

Germany

- Regional incentives if you refurbish or build new buildings with local materials or workers
- ECO-points for local value chain (e.g. wood)
- Munich: Green City; state level requirements for new building (ENEV)

Austria

- Local value chain (more sustainable)
- Public works as success case
- Incentives for specific materials, consumption etc.
- KGA -> buildings passport
- Graz: old brewery -> new area with resources autonomous
- National: action plan for the Danube
- Leader strategies
- Policies that look at projects from a complex multi-sectoral integrative point of view
- Clear goals, clear communication
- Multilevel stakeholder oriented approach
- Combination of top-down and bottom-up
- Strategies that combine ecological, economic and social aspects; stay distinctive and emphasize economic viability
- Use methods from other sectors that people are used to
- Ideas that use existing structures and do not cost a lot of money
- Combine laws with funding, let different levels of governance work together
- Policies that incorporate educational efforts

5.2 HOW TO MAKE POLICIES EFFECTIVE?

For more effective implementation of policies, people of different planning areas have to get connected with neighbor territories. Learning from specific examples of other territories leads to better planning activities. In addition, a holistic vision and coherence between policies and measures are needed. The promotion of EU funding opportunities could help to achieve more sustainability.

Participation of the private and public is needed for new initiatives.

Making the different entities talk to each other and having a holistic plan, which can tackle different areas, would make them more effective in practice to achieve sustainability.

For next year:

- Lifecycle count
- Monitor the effectiveness through indicators
- Monitoring of results and achievements (tools, verification schemes)
- Allow for longer project periods; follow-up projects on EU level
- CO2 bonus
- Have the right implementation tools (i.e. calculation of KPIs)
- Commitment based on European level indicators to raise the bar
- Clear rules and guidelines for district plans
- Center-protection
- Define the performance levels
- Only renewable energy
- Eco points
- Tax-advantage
- Good communication of the results of sustainable action of the territories
- Create synergies with private and public sector
- Anticipate the technics and costs for maintaining
- Stability: give policies a chance
- Monitoring of grey energy
- Harmonizing fire protection plans

5.3 WHAT ARE THE NEEDS FOR IMPROVEMENT OF ASSESSMENT SYSTEMS? WHAT ARE BEST PRACTICE EXAMPLES / IDEAS?

Assessment systems should oversee the whole life cycle of a territory / area and not only one specific area. Citizens should be informed about the benefits of the assessment. Citizens will be more engaged if they understand what the value and the impact on their lives is and how they can participate more. Generating awareness is a key strategy to motivate citizens to participate.

Another important point is to take into account longer period for assessments for e.g. of a project – so an extension of the project periods is needed to better evaluate the progress in the communities.

On the technical side, simple, easy to use tools to calculate KPIs have to be developed. Adaptations to new technologies are essential.

- Look at the whole lifecycle
- Show benefits of assessment to the citizen
- Generate public awareness / interest
- Longer periods to actually evaluate progress
- Need for tools to facilitate calculation of KPI's
- What do we do after assessment?
- Need to be adaptable to new technologies (i.e. smart meters)
- Look at the systemic impacts (not only energy consumption)
- Data collection at regional scale (private)
- Different levels of assessment: local regional -> harmonized KPI's
- KPIs easy to calculate (data should be made available)
- Common basis for assessment tools; to comply with EU-targets
- Yearly reports
- Give ideas on how to improve bad indicators

5.4 HOW TO PROMOTE AND FACILITATE THE USE AND IMPLEMENTATION OF ASSESSMENT TOOLS IN PUBLIC POLICIES, PUBLIC INCENTIVES, BUILDING CODES, GREEN PUBLIC PROCUREMENTS AND URBAN PLANS?

There are two ways of bringing people to use assessment tools: One way is to integrate the assessment tools into legislation and the other one is free will funding.

When thinking of user behavior, the legislation can lead to abandon houses or to illegal actions. At the same time, too much assessment can make projects or permits from administrations too expensive. Finally, any procurement system makes a difference between the best supplier and the cheapest supplier. As soon as the best consumer is overloaded with too much assessment, people will choose the cheapest supplier, which is not usually the best choice because it will reduce regionalism, reduce effectiveness and reduce ecological awareness.

Free will depends on offering incentives. People are more ready to do something when they are not obligated than when they are forced. Apart from giving best practice examples to citizens' assessment should be integrated into grant and tax relief schemes.

As an example, a database library of building products with all the data coming with them could be used to push forward the integration of Life Cycle Assessment (LCA) into the assessment. This could be a good source of information for assessment and it could be part of the public procurement process. In a sense, you facilitate assessment because you have a data source.

Recommendations:

The strategic environmental assessment is the only recommended legislation part. It really makes sense to integrate assessment tools to some extent, because strategic environmental assessment has to be done by the administration.

In Addition assessment and the time period of European funding schemes should be more in line. Continuity is an important matter and can only be assured if European Funding schemes are adapted to the evaluation duration.

The last recommendation is to keep KPIs simple and cheap – this ensures more resilience to lack of money and lack of manpower.

Risks:

- Legislative Obstacles lead to abandonment and illegal actions
- Assessment makes projects and permits expensive
- Too much legal requirements in procurement lead to choosing the cheapest supplier

Ideas:

 Require inclusion of assessment tools in the evaluation of Strategic Environmental Assessment - SEA

- Training of public authorities, technology offices, planners of assessment tools
- Integrate KPI into grant / tax relief schemes
- Integrate sustainability issues / KPI into city / regional marketing plans and companies
- Procurement: give good examples, benchmarks, mention assessment tools in the law as an (award) opportunity
- Provide the tool to carry out the assessment
- Library / database of building products with LCA / LCC data attach to tenders
- Source of information for data in assessment (start with labelled products)
- Create good catchy media about the success stories
- Central management for data and benchmarks
- Keep part of subsidies for assessment

Recommendations / Open Issues:

- Push for continuity between the local governments (assessment are long term)
- Specifically look for KPI which are efficient and cost little (choose the right ones)
- Easy and cheap KPI are more resilient in times of low financing and lack of sanctions (capacity to act)

5.5 WHY TO WORK ON A TRANSNATIONAL HARMONIZATION?

The situation at present is that we have different metrics even between regions of the same state. Harmonization means common goals, not common targets! Therefore, sustainability needs to work on territories – without local boundaries. Harmonized assessment makes exchange and learning of experiences possible.

CESBA is still not known enough. CESBA needs a clear introduction / explanation of what CESBA is about. CESBA has to start performing immediately. CESBA needs to share experiences between projects and share results outside of CESBA to make people aware of what CESBA does.

A clear view on how to connect all the projects is necessary. Continuity is a key factor, when projects end; the results should be preserved and pursued.

CESBA wants to harmonize assessment systems but still needs to keep an eye on the local specifies of each territory. A common framework is necessary but without losing diversity.

Local issues should be kept as important part of a big picture with common aims but local specifies.

CESBA needs to reach target audience e.g. by a 2 min. pitch including goals of the association, and do basic marketing and explain how to get the CESBA services, who is delivering the service and is there a proof that it works?

Results:

- Metrics are different even between regions of the same state.
- Harmonization = common goals not same targets!
- Learn and exchange of experiences
- Coherence between different levels
- Issues in local assessment systems give a push to harmonization
- Sustainability needs to work on territories → no local boundaries
- CESBA initiative is not known
- Need for harmonization depends on the subject
- Respect differences between local contexts
- Who you need to reach target audience
- Who can support you?
- Prove it works

Recommendations / Open issues:

- Integration with existing EU strategies and targets
- Reach decision makers
- 2min pitch for CESBA (including goals)
- Open up to lobbying

Main Message / Key Statement:

- Clear introduction of CESBA in the beginning
- Diversity also is positive lessons learned
- Show best practice examples and visualize
- Give it the time it needs, but start performing soon
- Give all partner projects more influence on each other, include the learnings
- → SHARE
- → CONTINUITY
- → LOCAL EU

What would hinder me to implement a best practice project / innovation at home? What are our learnings?

- Use of assessment tools and common KPIs to evaluate plans / integrate with processes
- Include more assessment tool owners to be representative

- More communication on the results to share not to compete
- Concentrate on the relevant issues
- Standards in methodology not the value behind!
- We share integrations "what for?"
- Take influence in CESBA as a member of the process and the organization
- Harmonization on a legal level e.g. fire protection
- Make sense and links between EU goals and local projects

GHG EMISSIONS of buildings; municipalities

	Numerous Municipalities (small scale)	Region
Monitoring	Actions (kg CO ₂)	Program (kg CO ₂₎
Governance		
Planning	SEAP	energy regional plan
Incentives	Subsidies, local product (IKZ)	Subsidies, regional programs
Training / education	Local training schools; addition to regional level	University, think tanks; regional development

Kwh = \$

- 1. Commitments
- 2. Background / Context
- 3. Actors: Business / Who
- 4. Main Issues / General Principles
- 5. Call for commitment

Commitments:

- We want to integrate social aspects
- We act with foresight in relation to our community / network
- We will support local SMEs to implement CE:
- Create appropriate frame conditions
- Support development of tools
- Involve each citizen / organization / private/ public body
- Promote education
- Educate people
- Change behavior

- Communication on different levels / easy understandable issues
- Promote alternative models (sharing economy)
- Change ECO Model
- Prepare shared strategy
- Promote collaboration

General Principles

- Eco design instead of end of pipe
- Design for environment
- Recycling oriented production
- Promote durability of products
- Increase reusable material
- Increase efficiency process
- Short distances and regional processing chain are prerequisite for circular economy
- Reduce transport
- For circular economy: regional first then national scope then transnational
- Awareness and training for decision makers is the basis for circular economy
- Behavioral change
- Long term view for public procurement (focus on life cycle costs)
- Cross sectoral networking
- Transparency and information
- Local collaboration
- CPP is possible but needs regionally adapted creative solutions
- Innovative products to optimize resource exploitation
- Everyone is actor in CE from single person to organization
- Target: 100% renewable materials; 100% renewable energy
- Use of local resources
- Limit resources extraction
- Reduce the use of national resources

Call for commitments: EUSALP / Alpine Convention:

- EU Policies and regulation must emphasis on regional value chains
- CE needs to be included in policies from local to European level

- Strengthen policy consensus on CE
- Set AS as a hotspot of CE
- Increase level of commitment to CE practices in AS
- Education about transformation no waste but resource
- Reduce barriers (including legislatives) for recycling
- Regional frameworks to create market conditions to give value to former waste
- Guidelines to support industry in reuse of waste
- Products which are easily dis-assembled for reuse
- Waste classification frameworks to facilitate recycling
- Develop financial programs to support CE implementation
- Encourage and support decentral initiatives based on local value chain
- Waste classification frameworks to facilitate recycling
- BIM for effective facilities management and long term refurbishment plans
- Leverage on ECO-Profit for private companies
- Link assessment with the funds
- Include assessment tools in awards for public procurement
- Be specific and show good practices
- CESBA as a bank of indicators for various projects
- Real evaluation
- Central management of the development process
- Keep training key professionals about assessment tools
- Integrate certain KPI into strategic environmental assessment (development, zoning, building plans)
- Competition for good assessment projects gives good image
- Assessment in design phase and after construction and operation -> split subsidies in steps
- - 20% kept for after assessment
- LCA could support some of the KPIs in assessment
- Eco platform EU wide library of EPOs
- Create networks for sharing experiences between officers
- KPIs in common can be shared
- Showing territories, the economical profit of sustainability
- Companies pay for each product independent company to assessment
- More input from all projects in the Alpine Space but how?

6 Circular economy, local resources, waste and materials. Green Public Procurement, legal implementation

Core issues of circular economy:

- Strengthening the value chain and emphasizing the meaning
- Transport
- Design (to make products reusable and compatible for circular economy from the beginning on)
- Flexibility (in order to be able to react on changes and new technologies)

The main issue is how to implement these issues into green public procurement and to a further extent in any kind of action field of public authority, while trying to take other actors and inhabitants into account.

Another important aspect is the border of circular economy that needs to be considered.

6.1 WHAT CAN WE LEARN FROM WOOD AS AN EXAMPLE FOR ECONOMIC GROWTH AND CIRCULAR ECONOMY?

Wood is a good example for materials, which are common, renewable and natural.

It can have a positive impact and we have positive examples, if all actors work together (business sector, processing chain, policy level, decision makers on different levels - like mayors for instance) we can actively trigger climate friendly timber products.

The incentives need to be linked and positive – such as subsidies.

Transport and value chains need to be addressed if circular economy and low carbon print shall be enhanced and shall strengthen regional processing chains.

Therefore, wood can serve as a positive example for integrating low carbon and regional processing chain issues into green public procurement. (Looking forward that the EU-project CaSCo will provide templates for that).

What are the latest developments on EU level? How will they affect my home region?

Green Public Procurement regulations are strengthened to enhance sustainability aspects in procurement in general. This allows an easier implementation of low carbon issues in green public procurement. Unfortunately, they are not enough triggered actively at present.

Another aspect is that there are many important targets set on European level towards sustainable development, but the general problem is that the main driving forces in the business sector as well as in the economy are not in line or even contradictory. This fact makes it difficult to have a real impact and to reach the targets and the goals.

Furthermore, there are already several existing tools and instruments which should be more broadly used across the European Union instead of developing new standards on European level. These different tools should be used to learn from each other.

The Building Innovation Modeling initiative (BIM) will influence all activities, but it is not clear if this will have a positive or negative impact, depending of what we make out of it.

A clear focus on incentives is another recommendation that should be considered.

6.2 WHERE ARE THE VARIOUS BORDERS FOR CIRCULAR ECONOMY? WHAT COULD BE OF TRANSNATIONAL HELP?

When talking about borders it is a precondition to know: what is the system and where are the borders of the system?

Borders circular economy

- Policies
- Behavior
- SME
- Legislation
- Process
- Technology
- Transport
- Geographic borders
- Links

One of the main and most important obstacles for circular economy is behavior. This limits the implementation of circular economy. This concerns the personal behavior as well as behavior of actors and enterprises.

Economic interests are driving forces, which are related to policies, but not only policy level (regulation) also economic policy.

Another important field of borders is legislation because between different countries different legislations occur or lack appropriate legislations.

The geographical borders are linked to the geographical scope and the definition of what is the wideness of the circle for the circular economy. Is it regional? Is it national? Is it transnational? This again is strongly related to the question: Is circular economy appropriate to SME? Further this is interlinked with the question of transport, which is therefore a core issue for circular economy.

Behaviors:

- Acting not reacting
- Influence of actors?
- Who is responsible LEAD?
- Border: Willing to think in long terms
- Is it possible to think for the whole system?
- Developing owns
- Multilevel circular economy
- Shared target

Process:

- What strategy?
- How?
- Diagnostic +-
- No new labels

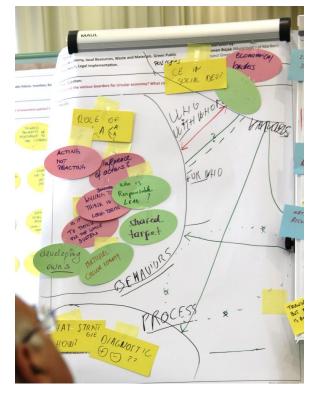
Policies:

- CE in social development
- Economical borders
- Specific interests

Who with whom? For whom?

SME:

- Incentives / DIS incentives latest development on EU level
- Is circular economy accessible also for SME
- Think about small and middle company's users
- S.M.E. role of S.M.E. products
- Regional chances



Legislation

• Legislation borders

Transport

- Different legislation in countries / regions
- Transport geographical / territorial limits
- National regulations latest developments on EU level
- Optimization of transportation enlarge borders
- Transport is an issue (empty transport is an opportunity)

Geographic Borders

- Geographical borders / scope of circular economy
- Regional borders are an issue but regional activities are not already ready
- Borders = Scale?
- Geographical/knowledge Borders

Links

- Transnational market of CE products, create a business
- Traditional construction systems
- Territorial CE + LA + business

Techs

- Technical limitations
- Technology
- Innovation / product development
- 6.3 HOW TO INTEGRATE KPIS FOR SUSTAINABLE DEVELOPMENT (DIVIDED IN PROCESS QUALITIES / SOCIAL QUALITIES / ECONOMICAL QUALITIES / ECOLOGICAL QUALITIES / CAPACITY TO ACT) IN GREEN PUBLIC PROCUREMENT?

Three major themes of circular economy: local resources waste and alternative models can be identified and described with the following indicators:

Indicators of local resources:

- A crucial factor to integrate the circular economy related indicators and targets into green
 public procurement is having professionalized knowledge in the region and knowing how to
 describe and formulate in a juristically and legal way.
- Local service structures to professionally support the actors
- Having knowledge and transparency in local resources by knowing what the information to trigger is and which aspects of circular economy are to be implemented.
- Defining the regional added value as a criterion for public procurement so that it can be addressed and measured could be one additional KPI
- Also human resources are local resources that have to be taken into account
- Moreover, having trust in local resources is a crucial factor

Indicators of Waste:

- Complexity of waste: waste has different elements / components with different values; they can be reused or recycled; treatment costs or waste value
- Data: collecting data is necessary in order to know what we have and to know the volume to develop industries
- Classifying for intended use and labelling recycled materials. Classifying and standardization
 is related to risks. A kind of standardization and common KPIs for this reason on European
 level is needed in order to reduce the risk for using the waste in business. (Economy of scale)

Indicators of Alternative Models:

• Circular public procurement is already possible but currently there are only regionally adopted creative solutions. This means that the legislation we have is already in place and that there are examples of very creative public procurement officers who have the knowhow on how to use circular public procurement. As not all have this knowledge, the regions will have to develop training courses to develop the know-how on how to use the public procurement and law regulations. This enables the development of their local economy, the use of their own resources and waste and the development of new models like car sharing. The problem for the municipalities is that often there is no long-term view, namely when it comes to public procurement support from the mayor must be planned in advance.

• The reason why circular public procurement is not yet used is because initial expenses are higher. Further reasons are that there is no know-how and there is a risk for the procurement officer who may have to take all the risks on him.

6.4 WHAT ARE THE MAIN ISSUES FOR A CIRCULAR ECONOMY MANIFESTO?

The circular economy manifesto contributes to the EUSALP action plan goal of "making the Alps a circular economy hotspot". The manifesto will connect similar-minded municipalities in the Alpine space improve transnational cooperation and increase relevance in EU context.

The manifesto is a procedure to be done at the end of the year. The questions that arise are: what is the structure of a manifesto and who do we want to address with it?

The manifesto is mainly for policies and decision makers but also for stakeholders from the Alpine region and from other regions.

The main principles and messages for green public procurement and sustainable development as a conclusion of all steps:

Circular economy is here to stay.

Circular economy is our future.

Circular economy needs patience, is long term thinking and designed to stay.

Circular economy needs good practice sharing and mainstreaming.

Circular economy needs awareness rising through pilots for success. Through local pilots, citizens can participate and learn what circular economy means for them locally and regionally. It's about how to involve citizens, how to communicate the results, how to represent circular economy due to the lack of a common EU wide definition.

7 CESBA Movement, EU- framework Innovation, and Projects.

CESBA is complex and therefore needs to be very clear.

One of the main tasks that CESBA needs to pursue is producing tangible results and using these results as flagships (e.g. the harmonization process, tools, trainings).

Out of these processes CESBA needs to build appropriate models for the capitalization of the results and then communicate these results through appropriate media channels e.g. a website. The appropriate media channels should be targeted to CESBAs' main target groups: professionals in the construction sector and public authorities.

The next step then is to expand the network (e.g. getting members by subscribing to the CESBA registration form).

7.1 WHAT ARE THE WEAKNESSES, WHAT ARE THE STRENGTHS OF CESBA? WHAT ARE NECESSARY CHANGES?



Strenghts

- On European scale 90 people from 13 countries
- Institutional recognition at European level
- CESBA addresses various scales like buildings, neighbourhoods, territories and citizens
- European lobbying CESBA influences the LEVELS initiative, CESBA gained the first subcontract with the EUSALP strategy
- Bottom up movement
- CESBA has no competitive interferences all can collaborate. CESBA does not compete with different assessment tools
- Comparability, cooperation and contextualization (benchmarking)



Weaknesses

- Unclear target group: Who is CESBA's target group?
- Complexity of the difference between the CESBA movement, the CESBA network and tools (confusion between these terms)
- Not enough members, or at least paying members
- Costs issues are not addressed enough in the various tools
- Weak user interaction (low involvement of the civil society and the citizens, which is linked to the question "who is our target group?")
- Low market recognition
- Weak communication and low knowledge transfer

Measures to tackle these weaknesses

- Reducing the complexity through the definition of what CESBA wants (movement, tools, KPIs)
- Defining target groups & users
- Reach out with appropriate communication tools (the use of the CESBA wiki is low increase
 usability or come up with a new tool)
- Having clear results on harmonisation and communicate them (dissemination of results)
- Expand the network (ambassadors & members)
- Spread the idea & the spirit
- (Deal with) language barriers

7.2 WHO ARE PARTNERS OF CESBA, WHAT IS THEIR CONTRIBUTION, HOW CAN THEY BENEFIT, HOW TO INTEGRATE THEM?

The main target groups of the CESBA network are:

- Professionals in construction
- Engineers, architects (practicing professionals, individuals & associations)
- Policy makers / local public authorities
- Owners / managers of assessment tools / systems
- European institutions
- Educational centers / institutions
- Associations

All of these target groups are capable to integrate the CESBA philosophy and at the same time can take advantages / benefits from it, but also CESBA needs to contribute to the CESBA association and CESBA movement.

CESBAs benefit from the professionals is to gain knowledge, experience and inputs while CESBAs contribution is for example the communication about project successes and failures, because CESBA has the ability to learn from good practices.

The contributions from associations (local or regional energy agencies, development agencies...) are money (membership fees), collective input and feedback. The benefit is recognition from the associations.

The owners of assessment tools profit as they can access the knowledge from other assessment tools and receive the recognition for it. Only one percent of buildings are assessed these days, so CESBA can contribute to more awareness. The owners of assessment tools profit because they can enhance their image, for instance by getting an award or label.

Policy makers on a local level can use these assessment tools in their policies and benefit from them and overview on best practice and contextualized policies.

European institutions will receive an overview on best practice of all European countries that are participating and may derive their legislations from them.

Educational institutions can develop research and training materials or share a task with their students.

7.3 WHO ARE PARTNERS OF CESBA, WHAT IS THEIR CONTRIBUTION, HOW CAN THEY BENEFIT, AND HOW TO INTEGRATE THEM?

Contributions	Target groups	Benefits
Better practices	Professionals (consultants,	Knowledge
Real projects	individuals, engineers,	Experience
Knowledge and know-how	architects,)	Input
(success and failures)		
Money! (Fees)	Associations (energy agencies,	Recognition
Collective input	development agencies,	
Feedback	regional associations)	
Knowledge		
Feedback	Owners of assessment	Image
Better buildings	tools/systems	Enhanced quality of life
Local contacts		
National information		
Building behavior		
Use of assessment tools in	Policy makers local public	Overview on best practice
policies	authorities	Contextualized policies
Legislation	European institutions	Training material
Trainings	Educational centers	Research
Methods		

7.4 WHAT CHANNELS SHOULD BE USED TO INCREASE THE KNOWLEDGE ABOUT CESBA? HOW CAN CESBA INTERACT WITH ITS TARGET GROUPS?

Professionals, owners of assessment tools and local public authorities are the three main target groups.

For professionals, the market recognition is very important, so CESBA needs to find the right channels. For owners of assessment tools the benefit is being part of a European community and for local public authorities the benefit is the support for implementing their local policies.

The channels to reach the target groups are a mix of offline and online channels:

Offline channels:

- Conferences
- Magazines
- Articles
- Workshops
- Seminars
- Direct contact
- National contact points

Online channels:

- Newsletter
- Blog
- Xing
- LinkedIn
- Wiki
- Multipliers

The idea is to set up national contact points because of the different languages that are still a barrier in administrations and then use multipliers (Covenant of Mayors, CA, NGOs)

CESBA needs to have clear results and get the results out to the target groups in a focused way. This means a clear communication of added value for each target group.

Channels for main target users are:

Professionals

- Press (articles in magazines) Interviews
- Rewarding / awarding
- Newsletter / Blog
- Conference / Workshops / Meeting
- Signs / Stamps
- LinkedIn
- Xing
- Electronic channels

Owner of assessment tools (public oriented)

- Direct contact
- Seminars

Local public authorities

- Award ceremonies
- Magazines
- Create competition?
- Multipliers (Energycities, Climate Alliance, Covenant of Mayors)
- Meetings of Climate Alliance, network organizations and NGOs

7.5 HOW CAN CESBA GAIN POLITICAL STRENGTH? WHAT IS THE POSITION OF CESBA IN THE EUROPEAN, NATIONAL, OR AT LOCAL PERSPECTIVE?

The basic requirement and what gives CESBA political strengths is that CESBA needs to have clear results. Demonstrating results means to agree on KPIs, to start a harmonization process and to proof to local, regional and European institutions that collaboration is possible. Only with results, CESBA can gain political strength.

At EU-level CESBA is defining a common framework for the sustainable built environment. This is one of the main goals of CESBA.

At national level and interregional level, CESBA is coordinating assessment systems (local systems, national systems, regional systems).

At local level, CESBA is supporting local authorities by implementing their sustainable built environment policies by using assessment.

How can CESBA gain political strengths?

- Meetings, events with politicians
- The EU should reference to the CESBA philosophy / results
- Brussels events / meetings
- Take part in existing events
- EUSALP Action groups (mainly AG2 and AG9), EUSALP Board)
- EU parliament / Committee of regions / regional delegation Brussels

What is the position / role / contribution of CESBA on the European, national or local perspective?

- CESBA is active in some networks
- Have concrete results
- Mandatory building certification in regulations

7.6 IDEAS, KEY WORDS FOR FURTHER THOUGHTS ON CESBA

- Market recognition
- European community based assessment tools
- Support for implementing policies
- Knowledge / Experience
- Staying up to date
- Input from others, advance expertise
- Information / News
- Business opportunities
- European recognition
- Provide better services to their members
- Local recognition
- Be part of EU Projects
- International image
- Lobbying at EU-level
- More power in Brussels / voice for lobbyism
- Increase the value of the building
- · Enhance quality of life
- Promote tools to increase exposure

- Develop more effective / faster / lower cost tools for better policies
- Creating own assessment tools
- Expertise to set up your assessment tool
- A methodology to develop and apply policies in innovative ways
- Best quality of life for citizens in the region
- Applicable in the field
- Use local subsidies
- Contextualized policies
- Comparability
- Real life policies / connected to the field
- Know-how from national experts / advisors
- Find the best practices in Europe and then can scale & promote
- Credibility research
- Feedback training / real life training
- Training material for students / ideas for teaching
- Real insight

Policymakers

- Use of assessment tools in policies
- Financing
- Set priorities for needs
- Sending their experts to CESBA meetings
- Promotion of CESBA principles

European Institutions

- Financing European project for CESBA
- Foster exchange and communication
- Use KPI for ERDF funds
- Beneficial legislation (EPBD) for assessment system
- Common European needs / perspectives

Educational

- Experts in sociology
- Training methods
- Make CESBA known to students
- Financing projects
- Preparing future professionals