WORKSHOP REPORTS

I.VIII TURIN

WORKSHOP DATES AND LOCATIONS

The first workshop was held on October 15th, 2014, at Castello del Valentino, one of the main locations of Politecnico di Torino. This workshop included both the presentation of the initial assessment results, and the definition of the 2050 post-carbon vision for Turin (in its relations with Milan).

The second workshop was held on December 3d, at the same location; it was focused on the back casting exercise.

PARTICIPANTS

Thirty people were invited to attend the first workshop; sixteen of them accepted the invitation, **fourteen** were actually present at the workshop. Thirty-eight people were invited to the second workshop; twelve of them accepted, **nine** were actually present at the workshop. Three people attended both workshops.

Different institutions were represented, so to cover most sectors:

- The Municipality by a member of the Transport Department, a member of the Urban planning Department and the coordinator of the Action plan for energy,
- Torino Strategica (the association which promotes strategic planning in the metropolitan area),
- Fondazione Torino Wireless (which coordinates and develops the ICT district in Piedmont region),
- Confindustria Piemonte and Collegio Costruttori Edili (the associations of the industrial and building entrepreneurs of the region),
- Three academic bodies (Politecnico di Milano, Università Bocconi and Alta Scuola Politecnica),
- SiTI (Higher Institute on Territorial Systems for Innovation),
- Dislivelli (an association for in regional planning in mountain areas),
- Agenzia per la Mobilità Metropolitana (which is responsible for public transport planning at the metropolitan level),
- RFI (the regional department of the national railway service),
- Car City Club (the local car sharing service) attended the workshop

As one can notice, the transport sector was highly represented as it is considered crucial for the integrated case study Milan-Turin (mainly focused on the opportunities offered by the high speed train connection between the two cities). On the other side, unfortunately, most of the invited experts of the environmental sector could not attend the workshops; as we will say, this has negatively influenced the building of the vision, but in the second workshop participants were able to identify milestones and actions also for the environmental dimension.

One member of FEEM (project partner of Pocacito in Milan) was also present; two participants (professors at Università Bocconi and Politecnico di Milano) were responsible in the last years of two researches about the relations between Milan and Turin.

Members of Politecnico di Torino coordinated the activities during the workshops and took part to the discussion.

The full list of names and institution for the two workshops is provided below.

First workshop

INSTITUTION	NAME AND SURNAME
Municipality – Department of Transport	Giuseppe Estivo
Torino Strategica	Riccardo Saraco
Fondazione Torino Wireless	Chiara Ferroni
Turin Action Plan for Energy	Gianfranco Presutti
Confindustria Piemonte	Cristina Manara
Collegio Costruttori Edili	Paolo Peris
SiTI	Chiara Casalino
Università Bocconi	Giuseppe Berta
Politecnico di Milano	Andrea Rolando
Alta Scuola Politecnica	Emilio Paolucci
Agenzia per la Mobilità Metropolitana	Andrea Stanghellini
RFI – Rete Ferroviaria Italiana	Natalia Picco
Car City Club	Tiziano Schiavon
FEEM	Andrea Bigano
Politecnico di Torino	Patrizia Lombardi
Politecnico di Torino	Stefania Guarini
Politecnico di Torino	Giulia Sonetti
Politecnico di Torino	Luca Staricco

Second workshop

Institution	Name and Surname
Municipality – Department of Urban Planning	Liliana Mazza
Torino Strategica	Riccardo Saraco
SiTI	Chiara Casalino

SiTI	Francesca Abastante
Alta Scuola Politecnica	Alberto Uberto
Agenzia per la Mobilità Metropolitana	Andrea Stanghellini
DIST - Politecnico di Torino	Luigi Buzzacchi
Associazione Dislivelli	Federica Corrado
FEEM	Cristina Cattaneo
Politecnico di Torino	Patrizia Lombardi
Politecnico di Torino	Stefania Guarini
Politecnico di Torino	Luca Staricco

I.VIII.I METHODOLOGY AND RESULTS FOR VISION BUILDING

METHODOLOGY FOR VISION WORKSHOPS

The first workshop was structured according to the methodology presented in the training workshop at the partner meeting in Berlin on September 9 and resumed in the deliverable T4.2 *Case study workshop guidelines*.

First of all, the Pocacito project was illustrated to the participants by the team of Politecnico di Torino. After that, the agenda of the day and the objectives of the workshop were presented.

A quick introduction round was asked. Most of the participants turned out to already know each.

The results of the Initial assessment for Milan and Turin were illustrated through a Power Point and participants' feedbacks were gathered. Data were agreed; some stakeholders suggested integrating them with further indicators about demographic trends (as they can have major impacts on carbon consumption patterns), presence and investments of multination companies, and passenger journeys between Milan and Turin. In particular, as regards the interaction between the two cities, some participants outlined that – according to the researches realized until now - the new high speed connection has had one main effect: it has reduced commuting times from Turin to Milan; but this effects has not generated further socio-economic or territorial trends. Participants agreed that at the moment it is probably too soon to observe these trends, and at least five - ten years should be necessary.

The vision building exercise was implemented according to the three envisaged phases: 1) drawing, 2) identifying key words describing drawings, 3) structuring them in mental maps. Participants were split in three groups; each group was asked to turn around three tables so to interact with other groups' work. At the beginning, participants seemed quite embarrassed by the requested drawing tasks; but after a few minutes, they begun to discuss their vision inside each group and to graphically represent their ideas on the papers. The three groups showed different approach to the drawing task: one adopted mainly figurative drawings, another preferred more abstract and schematic representations,

the third one introduced synthetic verbal expressions; the integration of these methods in the final draft of the drawings turned out quite interesting.

Afterwards, each group tried to interpret and describe the three final drawings through key words; these key words were then structured in mental maps, according to main themes (described in the next paragraph) that were chosen by each group autonomously.

One member of each group orally illustrated to the others the vision schematized through the mental map, and the three visions were collectively discussed. Finally, the FEEM member illustrated the vision that emerged in the previous workshop 1 held in Milan.

During the whole workshop, the Politecnico members coordinated and helped the groups in their activities, took notes and photos of the results; two members joined directly the groups and contributed to the vision building process as if they were "external" experts.

The agenda of the workshop is provided below.

AGENDA	
13:00	Reception and registration
13:45	Presentation of the Pocacito project
14:00	Presentation of the workshop objectives
14:10	Introduction round (participants presenting themselves)
14:15	Presentation of the Initial assessment results for Milan and Turin and interactive discussion
14:45	Vision Building exercise - first part (drawing, key words)
16:00	Coffee break
16:15	Vision Building exercise - second part (mental maps)
17:00	Analysis and comment of the results
18:00	Conclusion

MAIN SECTORS IDENTIFIED IN VISIONING A FUTURE FOR THE CITY

As it has been said, the three groups were asked to organize their mental map of the vision according to axes and sectors that they could autonomously identify.

One group focused mainly on differentiation, as the frequency of the prefix multi- in the key words witnesses. For a former one-company town as Turin, differentiating economic sectors (but also transport modes, and so on) represents the key challenge. This process has already begun in the last fifteen years in the case of Turin, but must be systematically enhanced. At the same time, this differentiation must be "specialized": the sectors that have to be promoted and developed can be identified in the specific niches of specialization of the city. The group selected three main axes, specifying for each of them a few main issues:

MOBILITY

- Multimodality;
- Space as value (it is not sufficient to ease movement, it is necessary to improve the space through which people move)

ECONOMY AND EMPLOYMENT

- Multispecialization (in the sense of differentiation of the economy in many specialized niches);
- Tourism and mobility (as key economic sectors for the 2050 post-carbon Turin);
- Multiemployment (each person has to be ready to have different jobs in the subsequent phases – but also in the same phase – of her life);

SOCIETY

- High birth rates;
- Strong resilience;
- Social differentiation and, at the same time, integration;
- Quality of life;
- Strong identity, built on the historic and specific vocation of the territorial context

A second group saw in quality of life the key objective of the 2050 post- carbon Turin, to be pursued along two axes:

ECONOMY AND SOCIETY

- Sharing economy;
- Wealth redistribution;
- New jobs;
- More youth, more brains;
- Specialization of the territorial context.

TERRITORY AND INFRASTRUCTURES

- Strong territorial identity;
- Connections and networks;
- Territorial integration

- Smartness.

Finally, the third group identified in the dichotomy center / periphery (and particularly, in the relation between Milan and Turin, where the first is strongest than the second) the main problem to overcome. The answer will be represented by the smartness, mainly intended by the group as people connectivity through technology innovations that allow the sharing of services.

THE 2050 POST-CARBON VISION FOR YOUR CITY

Below there is an attempt to integrate the three "mental maps" elaborated by the groups. This picture of a possible 2050 post-carbon vision for Turin is built around the following three key concepts:

DIFFERENTIATION

- The economic base is structured in a few specialized sectors (for Turin, for example, automotive, tourism, ICT etc.); they represent the strengths that make the city competitive and more resilient to economic crisis;
- The mobility system at metropolitan level is organized to be multimodal; people (residents, tourists, businessmen) are less dependent on private motorization and can easily move by more sustainable modes.

IDENTITY

- Even if deeply differentiated, Turin will keep and enhance its identity thanks to strong social integration, high quality of life, promotion of young people initiatives and start ups;
- Spatial resources, cultural heritage and landscape are recognized and developed as a crucial value.

SMARTNESS

- Technology is systematically developed to connect people, both inside the city and between the city and the global world;
- Sharing is a new key paradigm, for granting services (first of all, mobility) but also as an opportunity for economic innovation and new business.

REFLECTIONS

As one can notice, the final vision described above is mainly focused on socioeconomic issues, while environmental aspects have been quite neglected. In particular, the workshop participants have not considered energy themes fundamental in building the vision of a *post-carbon* city. A short-medium

vision was predominant, and stakeholders seemed to have a hard time imagining how the city should be 35 years later.

I.VIII.II METHODOLOGY AND RESULTS FOR BACK CASTING SCENARIOS

METHODOLOGY FOR BACK CASTING WORKSHOPS

The second workshop was organized according to the technique presented in the training workshop. First of all, the vision elaborated during the first workshop for a 2050 post carbon Turin was presented to the participants, as the normative desired end point.

The SSP scenarios were illustrated, with a main focus on the "middle of the road" SSP2 (which was chosen as the background reference scenario) and the two alternative scenarios (the "sustainability" SSP1 and the "fragmentation" SSP3) for the sensitivity analysis.

Participants were split in two groups, and asked to make a list of obstacles and opportunities till 2050 in achieving the vision. The members of the groups discussed their ideas and wrote them down on post-its; then, one member from each group described to the other group the proposed obstacles and opportunities, and placed them on a drawn timeline.

The same approach was used for milestones and actions: participants discussed them, wrote them down on post-its, and then pinned them on a timeline.

The final step was the robustness check: stakeholders were asked to assess if the proposed pathway would work – or need changes – also under the two alternative scenarios.

During the whole workshop, the Politecnico members coordinated and helped the groups in their activities, took notes and photos of the results.

The agenda of the workshop is provided below.

AGENDA	
9:00	Reception and registration
9:15	Presentation of the workshop objectives
9:30	Presentation of the vision from the first workshop
9:45	Presentation of the background scenarios
10:00	Identification of obstacles and opportunities
11:00	Coffee break
11:15	Identification of milestones and actions
12.30	Robustness check
13:00	Analysis and comment of the results
13:30	Conclusion

KEY POINTS OF THE SCENARIO

The stakeholders identified both short term (2015-2020) and long-term (2030-2040) obstacles.

The short-term obstacles were so described:

- The present global economic crisis is not contingent but structural, and entails lack of private investments.
- Italian public administration is weak, due to both debt load and lack of authority.
- Ecologic movements and policies are facing significant difficulties in these years, manly for lack of coordination.
- New models of governance/government are needed, also because of new institutional subjects (like the Metropolitan City, which has replaced the Province).

In the long term, obstacles to a post carbon transition could be represented by ageing process and lack of financial resources (e.g. venture capital).

Opportunities were instead grouped by the participants in short, mid and long term.

Between 2015 and 2020, advances in scientific knowledge and technological innovations (in particular, new apps for sharing services) could offer the possibility to reduce consumption of fossil fuels. A better integration could be achieved in public policies. Territories between Milan and Turin (in primis those which are better connected to their airports) can offer spaces and resources for new developments. The new institution of the Metropolitan City can be seen as a problem, as we have noticed, but also as the occasion for implementing more efficient policies. Finally, a new vision for Turin is now necessary, because the “Olympic city” one is finally out of date: the post carbon paradigm could be the core of this renovated vision.

In 2020-2030 period, new cultural models (as a consequence of the present economic crisis), new forms of collaboration between universities and local companies, and innovative smart technologies could emerge, opening major opportunities for post-carbon policies.

Also as a consequence of these mid term dynamics, stakeholder assumed that in the long term (2030-2040) the transport system (both for goods and passengers) in the city of Turin will be fully integrated and multimodal, and this will allow all economic sectors to work on more efficient and post-carbon standards.

Milestones and actions were identified for all the three dimensions of sustainability, and were aligned on the timeline in this way:

TIME	MILESTONES	ACTIONS

2020	Reduction of soil consumption	Preserve natural and agricultural soils
		Re-naturalize abandoned built areas
		Promote instruments for moving and concentrating building rights in the empty spaces inside the existing city
2020	Facing the ageing society	Enhance social housing
		Develop user-friendly technologies
		Improve welfare through ICT
2020	Turin as a touristic city	Create innovative offers and holiday packages for tourists
2025	20% reduction of emissions from buildings	Spread adoption of certifications of energy performance
		Adopt incentives to building renovation
2030	New jobs from green tech	Increase cooperation between universities and local companies
		Innovate financial tools for R&D and startups
		Promote renewable energy sources
		Enhance tertiary education in scientific issues
2035	50% reduction of emissions from transport	Introduce congestion charge
		Foster telecommuting
		Halve use of private cars through promotion of more sustainable mode of transport
2040	Turin as an inclusive and "shared" city	Define new models of education and training
		Innovate tools and resources for welfare

BACKGROUND SCENARIOS

Participants were asked to identify opportunities and problems, milestones and actions based on the "middle of the road" SSP2 scenario that was illustrated at the beginning of the workshop. As a last task, they were asked to evaluate the robustness of the proposed actions according to two alternative

background scenarios: the “sustainability” SSP1 and the “Fragmentation” SSP3, which respectively set low and high challenges (instead of the intermediate challenge of the SSP2 scenario) in reaching the 2050 post-carbon vision.

ROBUSTNESS OF ACTIONS AND FEASIBILITY

Participants claimed that they found not easy to identify the pathway to a 2050 post-carbon Turin on the background scenario, even more difficult was to take into account two alternative scenarios to test the robustness of the proposed actions. These difficulties were due to the present high incertitude about the future (as a consequence of economic crisis, climate change processes and so on), the long time considered (35 years, from 2015 to 2050), the accelerating role of technological innovations (which are very hard to predict).

Participants agreed that a real test of sensitivity was not possible. But they claimed that a general consideration was possible: in a “sustainability” low challenge scenario, all proposed actions could be implemented in a more radical and ambitious form; in a “fragmentation” high challenge scenario, a more selective approach should be necessary, in order to concentrate the poor resources on the best performing actions.

REFLECTIONS

Stakeholders were able to identify a complex and articulated list of obstacles, opportunities, milestones and actions, and to order them along a timeline.

Sometimes, distinction between milestones and actions was not so evident: some proposed actions seem objectives, rather than actual implementable policies.

In fact, 2040 is the final term actually considered in the pathway by stakeholders, which found too difficult to think about policies to be implemented in 35 years. Also the robustness check turned out to be too ambitious for this workshop.

I.VIII.III GENERAL REMARKS

Stakeholders perceived the proposed activities in the two workshops quite challenging: 2050 turned out to be a very long term for defining a vision and a pathway to achieve it. The actual economic crisis has hit Turin hard: local actors are concentrated in searching an exit strategy in the short term, and seem to find difficult to have a long term perspective.

Another interesting issue is the weak importance of the environmental dimension in local visions and strategies: actors working in economic and social sector scarcely consider post-carbon policies as a real opportunity for improving quality of life and increasing economic competiveness.

So, the two workshops have had this main positive impact: they stimulated local actors to adopt a long term, strategic approach, and to recognize that a post-carbon vision can represent a key issue in the local agenda.