



MULTI-STAKEHOLDER WORKSTUDIO:  
FROM A LOW CARBON 2050 TO TODAY



WUXI, CHINA  
24 OCTOBER 2012



UNEP/WUPPERTAL INSTITUTE COLLABORATING  
CENTRE ON SUSTAINABLE  
CONSUMPTION AND PRODUCTION



## INTRODUCTION

“Budding Ideas Glocally for 2050” (BIG2050), is one of the two<sup>1</sup> projects developed in collaboration with the German Ministry for Economic Cooperation and Development (BMZ) and the Collaborating Centre on Sustainable Consumption and Production (CSCP). BIG2050 aims to foster patterns of sustainable consumption by exploring the impacts of current consumer behaviour and lifestyles in different global contexts.

The project makes a contribution to the Global Network on Sustainable Lifestyles.<sup>2</sup> Specific objectives are to:

- identify critical environmental and social aspects of current consumer trends, consumption patterns and lifestyles in different global contexts;
- encourage a transition to a resource efficient future by communicating and fostering innovation to support sustainable ways of living.

As the world’s most populous country and having among the fastest-rates of economic growth, China and the lifestyles of its citizens is at a crossroads that will be a major determining factor in whether we will see a future of sustainable living or of increasing challenges to survival with the resources available to us on our single planet. Due to its high rate of economic development, China has become a major donor country for international aid rather than a recipient. Nonetheless, the country still faces a number of challenges such as reducing income disparities and providing access to opportunities among its population (150 million Chinese still live under the poverty line).

Building on this and many other challenges that stem from the economic and demographic growth in China, the Workstudio focused on understanding the local context in one Chinese city, Wuxi, the impacts that need to be overcome, the drivers to address these impacts and, most of all, on defining a vision for a sustainable lifestyle in Wuxi in 2050.

*“It is without any doubt that it’s fundamentally important to analyze the behaviour of Chinese consumers. Nowadays, people are getting richer and richer, and the lifestyle of people is becoming ever more diverse. A majority is living a comparably miserable low carbon life in urban and rural areas with a minority living a luxurious life with very significant impacts on climate change, the environment and social civilization. We need an in-depth analysis of the diversity of Chinese consumer behaviour and the REASON behind their behaviour including the economic, social, and environmental reasons. Only after that, can we make a reasonable package of suggestions to change of people’s behaviours to become more sustainable and low carbon.”*

Mr. Bi Xinxin. Coordinator -China Civil Climate Action Network(CCAN) China Association for NGO Cooperation (CANGO)



Mr. Charles Mathews - JUCCE/China Dream and Mr. Bi Xinxin - CCAN/CANGO during the first group discussion

<sup>1</sup> More information on the projects available in Annex 1

<sup>2</sup> <http://www.vision2050.net>

The table below presents a summary of Chinese lifestyle trends, aspirations of consumers relative to their European counterparts, and some identified promising practices.<sup>3</sup>

	Similarities	Differences	
		China	Europe
Current trends	<ul style="list-style-type: none"> <li>• Growing middle class</li> <li>• Ageing society</li> <li>• Increasing meat consumption → health issues arise</li> <li>• Increasing number of automobiles</li> <li>• Increasing unemployment, especially among youth</li> </ul>	<ul style="list-style-type: none"> <li>• With modernization and economic development, consumers are pursuing the “good life” which is largely based on consumption</li> <li>• Growing population</li> <li>• Dense population → too little private space</li> <li>• Cheap labour in manufacturing sector</li> </ul>	<ul style="list-style-type: none"> <li>• Further population growth unlikely</li> <li>• Ownership of living space per capita is growing</li> <li>• Labour costs increasing as well as debt levels</li> </ul>
Visions/ Aspirations	<ul style="list-style-type: none"> <li>• Urban/ rural development important factor in the future (space, transport/ mobility)</li> <li>• More local (food) consumption and production</li> <li>• Technological innovation drives energy efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Energy and the use of resources are important impacts that affect and are affected by lifestyle visions</li> <li>• Employment and work conditions represent an important factor for future aspirations – especially in terms of related education</li> <li>• Technical issues are the most important driver</li> </ul>	<ul style="list-style-type: none"> <li>• Lifestyles and different areas depend on reforms/ changes to the economic system</li> <li>• Social shift: individualism → community building</li> </ul>
Promising Practices	<ul style="list-style-type: none"> <li>• Some of China’s promising practices replicate successful European practices</li> </ul>	<ul style="list-style-type: none"> <li>• Few of the identified promising practices are focused on attitude and behavioural change, but rather rely on the technical/production side to reduce resource consumption.</li> <li>• Most Chinese practices are connected directly to policy makers.</li> </ul>	<ul style="list-style-type: none"> <li>• Promising practices cover a wide range of lifestyle areas (consumption, urban-rural development, resource consumption,...)</li> </ul>

<sup>3</sup> Information provided by the SPREAD Sustainable Lifestyles project. (<http://www.sustainable-lifestyles.eu/>)

## THE WORKSTUDIO

On October 24, 2012, the energy efficient building of the Wuxi Reatgreen Energy Saving System Science Co. Ltd. hosted the BIG2050 Workstudio in China<sup>4</sup>. Presented as a back-to-back activity in the context of the Chinese-German Low Carbon Future Cities<sup>5</sup> (LCFC) project, the Workstudio, entitled "From a Low Carbon 2050 to Today", attracted 42 representatives from diverse stakeholder groups from both China and Germany.

By applying interactive tools and methodologies<sup>6</sup> the Workstudio enabled a rich dialogue on perceptions and aspirations of Chinese and German participants. This enabled an analysis of sustainable ways of living by identifying and exploring opportunities for social innovation and entrepreneurial solutions in the context of consumer behaviour in China.

By reviewing promising and innovative models and approaches participants were able to:

- gain insights into innovative tools and approaches used for community inclusion, and
- share networking opportunities with partners, donors and support organizations working on consumer-related issues

The highly dynamic morning workshop, delivered by the LCFC project team, provided insights into consumption related lifestyle challenges and trends in China, with a very thorough review of promising Chinese business practices. Following this workshop, Mr. Neil Coles of the CSCP and Mr. Charles Mathews of the China Dream<sup>7</sup> introduced consumption trends and current lifestyle impacts in China. Examples of social engagement to reshape consumerism and reduce environmental impacts of China's increasing middle-class were also shared.

Two keynote speeches provided facts, figures and the context of China's current and projected future consumption trends with the aim of challenging participants for the remainder of the workshop.

*"The methodology applied in the Workstudio is great. Especially when everyone enjoyed so much to act as someone in the future. Lifestyle is for sure a very important part of our sustainable future. The Chinese way of living was generally low impact for both consumption & emissions. But we are unavoidably changing, although the changes are very much unevenly distributed both within society and in the spatial dimension. It's not so easy to understand this diversified Chinese lifestyle. But there's no need to be overly pessimistic, society is now transforming towards a brighter future with everyday uses for the most up-to-date information technologies"*

Dr. Zou Tao. Deputy director Beijing Tsinghua Urban Planning & Design Institute



Charles Mathews presenting the China Dream

<sup>4</sup> Full program of the event is present in the Annex 2

<sup>5</sup> <http://www.lowcarbonfuture.net>

<sup>6</sup> More information on the CSCP visioning sessions and methodologies are available in Annex 3

<sup>7</sup> <http://jucce.org/chinadream>

# LIVING IN A LOW-CARBON CHINA

## VISIONING FUTURE LIFESTYLES

By analyzing the lifestyles of different Chinese consumers in 2025, and discussing their motivations, aspirations and living conditions, participants created scenarios for 2025 and explored mid-term drivers and impacts that could enable more sustainable living in 2050.

Based on the participant input, the definition of a “good life” in 2050 was seen to comprise living in a country with e-solutions for housing and mobility, the latter being through efficient public transportation that allows easy connections between the countryside and cities.

### SCENARIOS

#### URBAN-RURAL DEVELOPMENT AND USE OF NATURAL RESOURCES

A majority of employment opportunities will be found in equally proportions in the countryside and in the city, with a focus on solutions that improve the efficient use of resources, minimizing extraction of raw materials and on recycling, up-cycling and down-cycling activities.



#### ENERGY GENERATION

Energy farming has become commonplace in rural areas, which reduces gaps in wellbeing between cities and rural areas. Renewable energy and co-generation facilities, waste treatment and zero-waste activities are part of the solutions that support clean communities and secure energy supply.



#### FOOD AND HEALTH

Chinese cities in 2050 will be low-carbon communities with offering mainly locally-grown products, very little meat, and showcases of revived local customs and rural styles of cooking.



#### MOBILITY

As travel is very important, the infrastructure that connects rural and urban communities will need to enable carbon-free transportation options such as electric cars that can be used in sharing or leasing schemes. Vehicle ownership will be limited as it will be more convenient to use public transportation, which is also preferred by a majority of the population as there are far more older people in 2050 than in 2012.



#### HOUSING

Housing solutions are also related to a return of people to rural areas. Small housing complexes will allow individuals to spend some time alone as well as connect with other members of the community. This is also facilitated by home-offices becoming a widely-accepted activity and smart ICT solutions for houses support shared green spaces. Housing solutions also supports the development of health-centres that enable open-air activities and people of all ages access the high quality health services as they can monitor their health status and receive needed treatment.



*“A low-carbon sustainable living China of 2050 will require the effort of two or more generations with detailed plans and policy advocacy; experience sharing and awareness raising or education for different industries and stakeholders from across all of society. A lot of significant ideas and solutions will be consolidated during and after the workshop for future reference and implementation. But due to the gap between this big dream of a low carbon China in 2050 and the reality of today’s lifestyle trends, the challenge we face is tremendous. The Chinese government and people alone are not strong and powerful enough to achieve this target”*

Jane Cai – International Copper Association Asia



*Analyzing consumer behavior: Jane Cai – International Copper Association Asia, Yun Fei – EcoVane Environmental Co, Zhang-Jingjing – A&T Technology Development Beijing Ltd (in order from left to right)*



## EMPLOYMENT, SKILLING, COMMUNICATION AND LEISURE

Policy-wise, ICT solutions continue to enable open dialogue between government departments and communities, and e-learning/online training and certifications become part of the education system. Training and self-improvement are common and used to refine skills and provide quality education to all citizens regardless their location or occupation.



## IMPACTS AND DRIVERS OF SUSTAINABLE LIFESTYLES

The scenarios were drafted based on the participant input to address different lifestyle impacts. The charts represent the perceptions of participants. Figure 1 illustrates the view that lifestyles in 2050 are largely impacted and shaped by activities related to energy generation, urban/rural development, resource consumption and employment conditions. Using these same scenarios and the analysis of impacts, participants suggested that by 2050, health, education and governance are the areas with the lowest impact on Chinese lifestyles. Lifestyles have a medium impact that arises from and is affected by activities related to communication, leisure and culture, housing, mobility and eating/drinking.

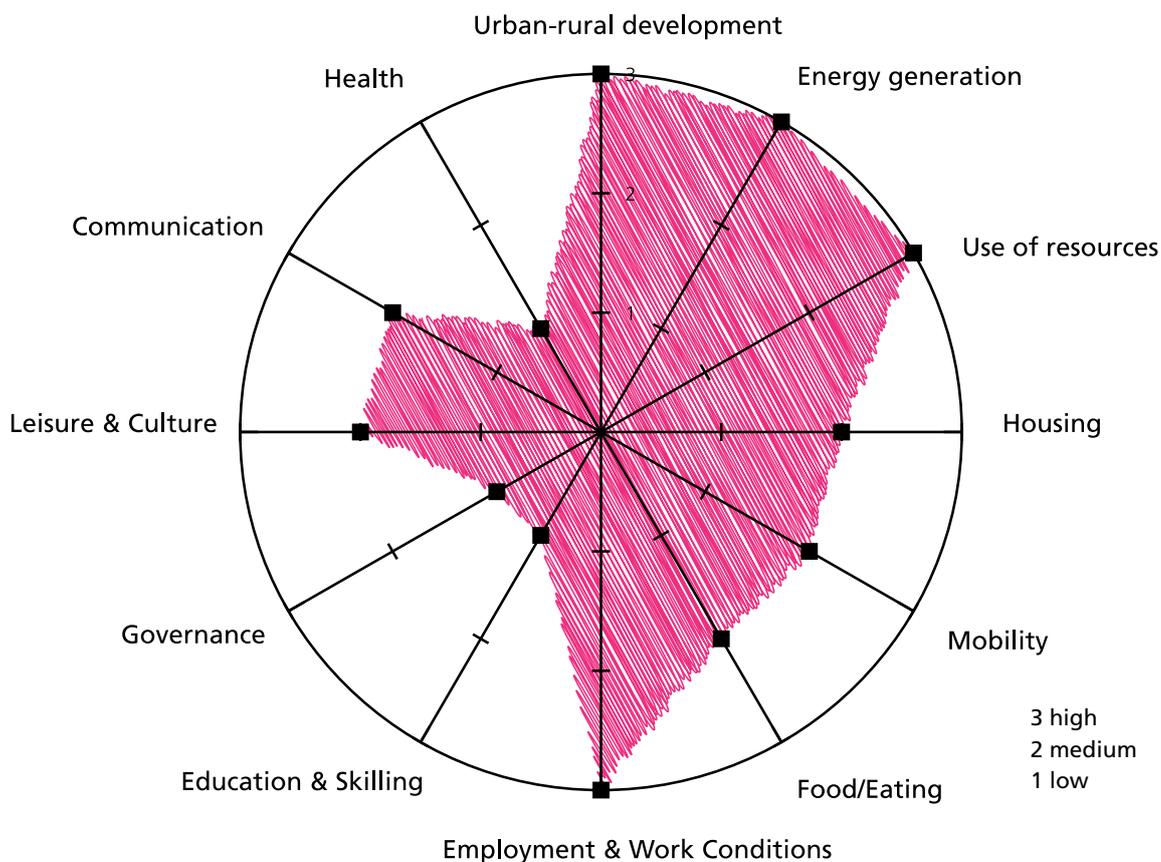


Figure 1. Areas with most relevant impact on/of lifestyles

As shown in figure 2, drivers for sustainable living in 2050 in China vary for each of the lifestyle impacts. These are presented as the necessary short and mid-term solutions (2012-2025). Participants highlighted that actions for rural-urban development, housing, mobility, health solutions and resource use will be primarily driven by policy makers and their decisions. Tools to drive these solutions were seen to include infrastructure development and capacity building.

Technological drivers will be those that support clean energy generation, efficient resource use, communication and, to lesser extent, mobility.

Economic mechanisms, such as the development of new business models will drive employment and work conditions and change patterns of urban/rural development, energy generation and leisure and culture. Economic mechanisms are projected to exert a small but significant impact on the development of housing, resource use and communications patterns.

Social drivers, such as social innovations and behavioural change activities, are seen as shaping mainly eating and drinking habits, leisure and cultural activities, and employment and work conditions. The use of natural resources and health issues are affected by social drivers to a lesser extent.

Participants emphasized that policy is seen as a major driver to influence lifestyle changes in China.

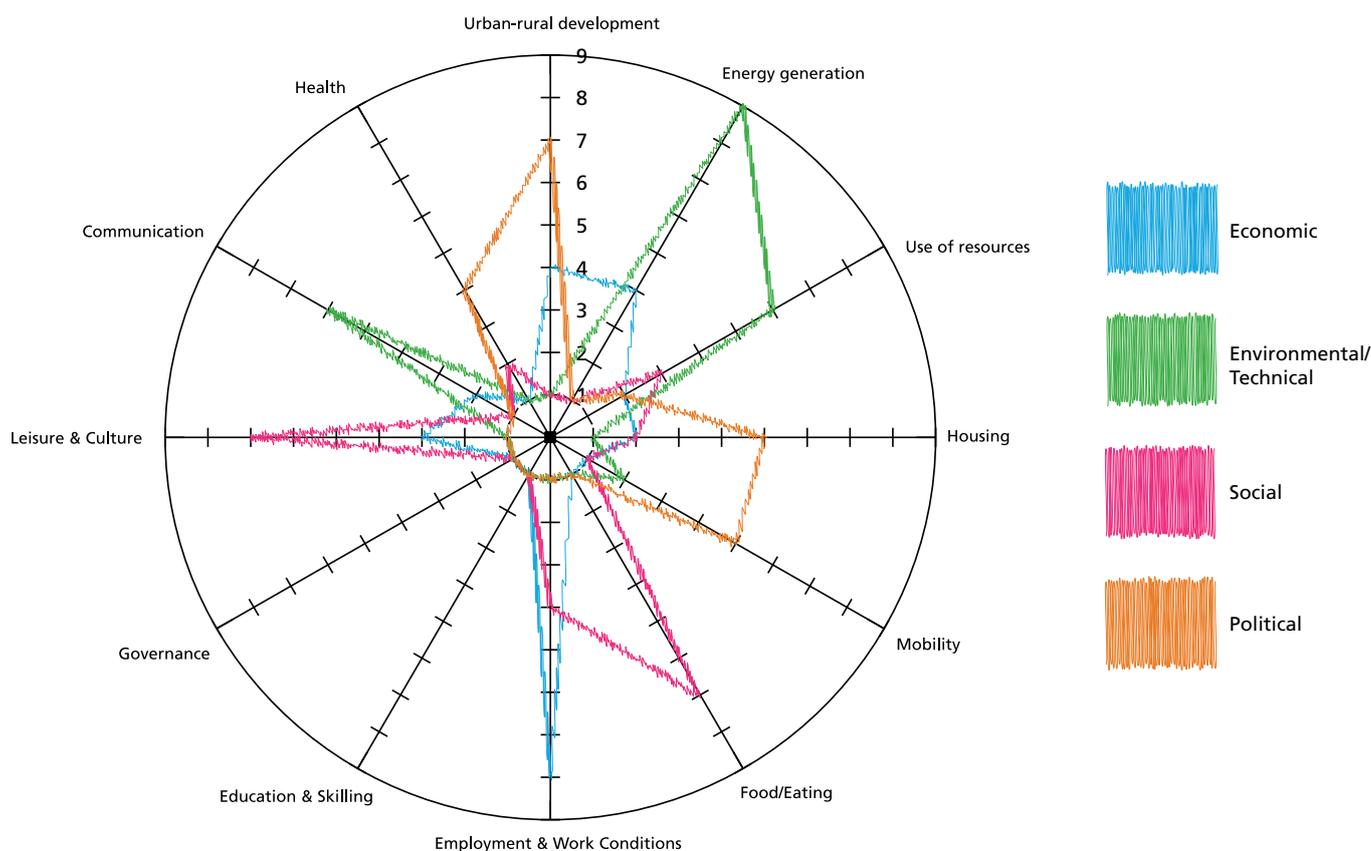


Figure 2. Drivers enabling actions to address identified impacts

## THE WAY FORWARD

After discussing current promising practice in China and globally, participants developed an action plan to support the practices that are seen as most promising.

The plan that was developed has the following characteristics:

### MILESTONES

- Collaboration with developers that consider product life-cycles and the capacity of products, particularly for buildings and other infrastructure.
- Consumer awareness to shape demand in terms of product and service quality rather than just cost. Also to properly value re-utilization of existing resources and improve waste management, the waste management industry offers one of the most promising opportunities to improve value chains.
- Dual education, apprenticeships and vocational training is crucial to establish consumer protection and improve services.

### OPPORTUNITIES

- Policies for scaling-up successful practices are crucial. In the building sector, for example, scale-up of successful practice presents significant employment opportunities, particularly for re-use of construction waste, which can lower costs for raw materials and demonstrate that it is possible to produce high-quality products through effective reuse of existing resources.
- Continuous use of social media and other communication channels can help raise awareness about the possibilities of sustainable living as a realistic expectation to strive toward. Promising practices are a good opportunity to demonstrate how innovative solutions can create meaningful impact.

*"To me, the very different approach used in the BIG2050 workshop was definitely a good experience. Until the day of the workshop I did not even think about the question of how I personally might live in 2025. Now I do. The analysis of Chinese consumer behavior is a necessary basic step to get access to Chinese everyday life and current societal developments in China. Only if one knows about the needs and desires of people is one able to develop ways to lead people toward a more sustainable future lifestyle. I had the impression that tradition on the one hand and the wish to lead a modern life on the other hand influence Chinese lifestyles very strongly. So that is a challenge - especially for young Chinese people - to combine the „best of both Worlds“*

Marcus Temburg - Rhein-Kreis Neuss  
Amt für Entwicklungs-, Landschaftsplanung und Statistik



Impacts on/of lifestyles discussion

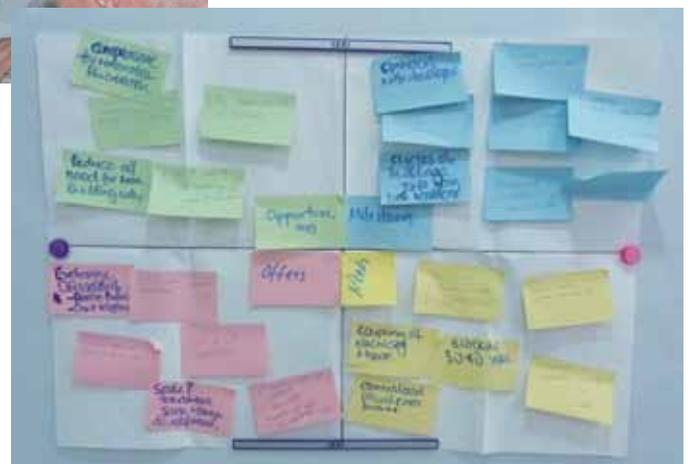


Photo of the action plan following the discussion of promising practices

## OFFERS

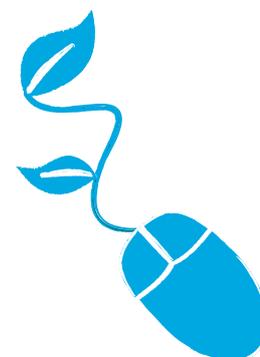
- The identified promising practices included identifying ways to build linkages between stakeholders, finding the means to secure financial support to enable new sources of employment, and the application of technology for diverse solutions, including health.
- The circular economy presents a great opportunity to enable exploration and exchanges of knowledge that can improve training and qualification schemes.
- The current means of private finance and government investment also offer a fertile soil for innovators to implement sustainable solutions that are rapidly accepted in China.

## NEEDS

The identified promising practices also revealed a variety of needs of Chinese consumers, beginning with:

- maintenance technologies and monitoring and information networks that will help bridge the gap between the different levels of development across the country.
- continuing the dialogue and including more stakeholders in the process, as lifestyles are the outcomes of the choices people make and largely depend on what is available in their surroundings.

International organizations willing to explore opportunities to enable sustainable lifestyles in China should be aware of the importance of engaging policy makers while promoting a culture of education and social inclusion. The growing middle class is a promise for sustainable consumption models if properly introduced today. This is an opportunity worth seizing.



Rena Wang presenting the impacts discussed in her team

*“There is a global need for China to become a pioneer in leading a global economic transition, as well as a need to exchange experiences with other countries in terms of consumption patterns and lifestyle transformation. The Big2050 Workstudio in China is a good platform for China to start to get involved in the global discussions. It gathered domestic stakeholders to discuss the most important drivers and impacts for the shift from current lifestyles to a low carbon future. Also it is a good opportunity to share with the international experts and networks the most promising ideas. The practices in China that were identified in the BIG2050 project can have a long term impact on global sustainable development, and China will also benefit from the contribution from other continents.”*

Chuanrong Wang – Sustainability in Asia Expert. Consultant for the CSCP China focal point

## ANNEX 1



About the two collaboration projects with the German Ministry for Economic Cooperation and Development.



### **BUDDING IDEAS GLOCALLY FOR 2050 – BIG2050 PROJECT OBJECTIVES**

- Identify critical environmental and social impacts associated with current consumer trends, consumption patterns and lifestyles – across different global contexts;
- Encourage the transition to a resource efficient future by communicating and fostering innovation for more sustainable ways of living

BIG2050 was launched at Rio +20 in June of 2012 and has begun to collect promising practices and examples of sustainable ways of living from around the world. Through multi-stakeholder workshops, this project will explore the environmental and social impacts, consumer trends and aspirations, and future visions of more sustainable lifestyles across five global regions and nationalities: China, Colombia, Ghana, the Philippines and Germany. This project also launched the Global Network on Sustainable Lifestyles, available at [www.vision2050.net](http://www.vision2050.net)



### **BUSSINESS INNOVATION FOR SUSTAINABLE SCALE-UP – BISS PROJECT OBJECTIVES**

- Identify and assess innovative sustainable business models and success factors to scale up sustainable living impacts.
- Link knowledge and practice on innovation, entrepreneurship, and sustainable living and strategies and tools for implementation and scale up.

BISS was launched at Rio+20 in June of 2012 and has developed a Sustainable Innovations Framework, which will be used to identify the five key success factors to scale up sustainable business innovations. The project will run Workstudios in parallel with BIG2050, host webinars and provide foundation research and building blocks for the Global Network for Sustainable Innovation and Entrepreneurship, available at [www.scaling-up.net](http://www.scaling-up.net)



## ANNEX 2

### Workstudio program

09.00 – 12.00	Low Carbon Entrepreneurship Workshop – Part of Low Carbon Future Cities Program
09.00 – 09.45	Introduction and presentations by successful low-carbon entrepreneurs
09.45 – 10.20	Applying Entrepreneurial Landscaping – a case-based learning session;
10.20 – 10.35	Coffee Break
10.35 – 12.00	Joint Action Plan Design – transferring learnings to Wuxi
12.30 – 13.30	Common Lunch
14.00 – 17.00	BIG2050 Workstudio- From a low Carbon 2050 to Today
14.00 – 14.30	Introduction: Consumption in China today – Neil Coles. CSCP Innovative approaches to Consumption- Charles Mathews. JUCCCE
14.30 – 16.00	Analysis of Promising Practices- Stakeholder Group discussions (visioning session and scenario creation)
16.00 – 16.30	International practice discussion (with coffee)
16.30 – 17.00	Creation of action road map
17.00 – 17.45	Business Networking/ Cocktail

## ANNEX 3

### CSCP work on visioning and methodologies

Objectives of visioning workshops:

- Perform social research on impacts and drivers that lead to sustainable lifestyles
- Support participants to envision responsible new ways to engage different stakeholders in the co-creation of visions and scenarios of a common future.
- Appeal to the emotional side of participants as well as their rational understanding to enable creative problem solving.

Use immersive tools to:

- Engage participants in future thinking
- Challenge assumptions about the future that participants want to be part of
- Introduce the scientific-planning methodology of backcasting
- Invite other stakeholders to the dialogue and action
- Deepen participant understanding of the evolving dynamics that will drive consumer behaviour over the coming several decades
- Tap into potential social innovations

Among these tools, the most used are a wide array of “personas from the future”, which are used to help understand the needs and lifestyles of people living in the future and support participants to get into the shoes of other consumers.

These methodologies are normally applied in group settings that support dialogue and agreement, as well as introspection and challenge participants to reconsider their assumptions.

Sessions are facilitated to ensure the collection of outcomes which are to be presented both in graphic and text format. Outputs of the visioning sessions serve as findings to create recommendations, enable targeted discussions and conduct detailed planning-backcasting processes.

The CSCP has developed and adopted the tools and methodologies to apply in different industries and for different purposes. Some of these methodologies were developed in collaboration with partners such as the European Environment Agency, Nokia, Deutsche Telekom, the Global e-Sustainability Initiative (GeSI). Output documents can be downloaded from the Global Network on Sustainable Lifestyles’ knowledge center.



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Facebook/[big2050](https://www.facebook.com/big2050)

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