## Suwon, Republic of Korea

One neighborhood. One month. No cars: the Suwon EcoMobility World Festival



For an entire month, Suwon closed the streets of one central neighborhood to fossil fuelled automobile traffic, whilst actively promoting the use of sustainable modes of transport. Residents and visitors of the vibrant, friendly community got to engage in automobile-free activities and experience an ecomobile haven in an evolving city.

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### Abstract

In September 2013, Suwon, Republic of Korea, became the pilot city for the inaugural EcoMobility World Festival. After more than a year of preparation through resident surveys, expert input, and rigorous planning, and with the support of stakeholders, policy reinforcement, and infrastructural adjustments, Suwon closed the streets of one neighborhood to fossil fuel dependent automobile traffic. In lieu of cars, project facilitators encouraged residents to rent, free of charge, one of a variety of alternative, sustainable modes of transport that had been provided by the local government. The event was a great success, garnering international attention, as well as enthusiastic local support. During the entire month of September, 98 percent of all neighborhood cars remained outside the Festival area. The period following the Festival suggests a lasting legacy: residents are interested in retaining many of the ecomobile aspects of their transformed neighborhood as long-term fixtures.

## Breaking the cycle of fossil fuel dependency, placing an emphasis on quality of life

Cities are hubs of human activity and life, but as more people flock to cities, the balance between rural-urban population-distribution shifts increasingly to urban areas. This means that ensuring that urban areas are habitable has become more important than ever. As cities expand rapidly to accommodate more people, the standard of living in many cities is at risk.

Automobile traffic is both a key determinant, and threat, to the quality of life in urban areas. Traffic congestion creates both air and noise pollution, and poses safety hazards for pedestrians, cyclists, and drivers. By 2035, transport is expected to become the single largest greenhouse gas (GHG) emissions sector, accounting for 46 percent of global emissions. By 2050 this figure is projected to reach 80 percent (ADB, 2013). A byproduct of high car use in an area is that road infrastructure is often associated as being designated for cars, which then prioritizes them above other transport modes. The perception that a car is a necessary for mobility encourages further car use, thus creating a self-reinforcing cycle of automobile dependence. In order to disrupt such a cycle, substantial change is required.



Population Approx. 1.2 million (2013))

Land area 121 km<sup>2</sup> (2011)

Municipal budget 180 million USD(2011)



Suwon has been a member of ICLEI since 2005, and a member of the EcoMobility Alliance since 2011.



#### **Eco-Mobility Alliance**

Suwon is a member of the EcoMobility Alliance, a network that brings together cities which are committed to providing sustainable urban mobility infrastructure.

The vibrant, ambitious cities in the Alliance display leadership, foresight, and accountability, and pave an EcoMobility path for others to follow.

## Suwon: forging a path for others to follow

Suwon rose to the challenge of breaking automobile dependence by committing to host the first ever EcoMobility World Festival. Suwon, a member of the EcoMobility Alliance, is the provincial capital of Gyeonggi-do, Republic of Korea. It is a city of over one million inhabitants, and is located 30 kilometers south of the capital Seoul. In 2012, Suwon's Mayor, Yeom Tae-Young, saw a need for EcoMobility in the city, and thus signed a memorandum of understanding with ICLEI, together with co-organizers UN-Habitat, to host the first EcoMobility World Festival.

After an extensive investigative process that included neighborhood surveys, urban planning assessments, and consideration of social capital, the Haenggung-dong area was chosen as the neighborhood to undergo an EcoMobility transformation. Due to development restrictions in place to preserve the UNESCO World Heritage Site Hwaseong Fortress, which surrounds the Haenggung-dong area, the neighborhood possessed a traditional character that distinguished it from more metropolitan areas of the city. Consequently, Haenggung-dong was also the most underdeveloped neighborhood in Suwon, and municipal leaders had long desired to improve its infrastructure and living conditions, which had negatively affected the social atmosphere of the area. Thus, the Festival was considered to be the perfect opportunity to make a transformation that would improve the built environment, enhance ecomobility, and reinvigorate the community spirit.

## The challenging process of transforming a neighborhood

In September 2012, one year before the Festival, the City began the consultation process regarding the removal of cars from Haenggung-dong. Suwon City officials hoped to avoid using any legal mechanisms to remove the cars, and opted to facilitate the changes through interactive discussion and voluntary resident



**EcoMobility Festival Successes** 

cooperation. City officials conducted door-to-door visits; explaining the Festival objectives and recording the comments and suggestions of each household.

Following the extensive consultation process, the City developed plans for how the residents would live car-free for one month. Mayor Yeom embarked on an extensive neighborhood regeneration program that focused on transforming the Haenggung-dong neighborhood into an area that prioritized people-oriented environmental sustainability and accessibility.

There was initial resistance to the concept of a car-free neighborhood. Residents wondered what would happen to their cars and how would they get around. Local business owners worried that customers might avoid the neighborhood if they could not access it by car. To relieve concern, a program of workshops, consultations and EcoMobility training was created so as to involve residents in the planning of the event. To further ease the transition, the City held two Car Free Day's in the months leading up to the Festival to provide a trial run, and declared that four parking lots dedicated for residents, which during the Festival could accessed by a 24-hour electric car shuttle, would be established around the perimeter of the Festival area. The City's passionate commitment to outreach was successful: with two days to go before the Festival launch, around 70 percent of residents initially identified as opposed to the project had changed their opinion and supported the event.



Areas previously designated for parking were redesigned as pocket parks and public spaces for residents to enjoy.

# Physical transformations for an enjoyable, human oriented neighborhood

Physical improvements were a crucial aspect in the transformation of the Festival neighborhood. Shop façades were repaired and revamped to make the main streets more inviting to pedestrians. Community artists painted a series of decorative murals, adding vibrant local character to the newly designed streets. Streets were leveled and repaved, and former parking spaces and lots were designated as pocket parks, bicycle parking, and public spaces for residents to use and enjoy. Festive street furniture, in line with the EcoMobility theme, was installed in the new pocket parks to serve as functional decoration.

On the 1st of September, 2013, the Festival began with a grand-opening ceremony and the commencement of the EcoMobility 2013 Suwon Congress, a major international event that brought sustainable planning experts and local governments from all over the world to Suwon for four days to experience and participate in the Festival, and to discuss sustainable urban mobility.

Infrastructural improvements were not only related to road-work; sewage infrastructure was upgraded and overhead cabling was buried, improving both the functionality and appearance of the neighborhood's infrastructure. During the first week of the Festival, Jeongjo-ro, one of the main traffic arteries in Suwon, was converted into the "Suwon EcoMobility Street". Two lanes were allocated for buses and taxis, while the two remaining lanes were reserved for non-motorized and small electric vehicles. Hwaseomun Street, the main arterial shopping street, was transformed into a pedestrian zone, and was alive with cultural and community events throughout the month of the Festival.

In addition to the four designated parking areas that allowed residents to park their cars outside of the Festival area, 400 ecomobile vehicles were rented out to the residents for free during the month-long Festival. As a result, more than 98 percent of the registered cars were removed over the course of the event. This achievement was only possible because of residents' cooperation and support for the EcoMobility initiative. As a result of their ambitious and participatory efforts, Suwon attracted widespread attention from international media outlets and sustainability experts, as the world watched an inner-city neighborhood live without cars for a month.

## **Budget and Finances**

The City spent 13 billion KRW (equal to approximately 9 million Euro and 12 million US dollars) on infrastructure improvements, and an additional sum on the events (congress, cultural programs, etc.).

During the Festival, a coupon scheme totaling 200,000 Euro in value was introduced to ensure that the local economy received a boost from the Festival activities. For example, a visitor paying 3.50 Euro for a Light Electric Vehicle



tour would receive a 3.50 Euro coupon valid for over 169 local shops participating in the coupon scheme, 85 percent of which were in the immediate area. In the first four days of the Festival alone, coupons provided to the EcoMobility 2013 Suwon Congress participants resulted in over 900 meals being sold by local vendors. By the end of the Festival period, coupon sales reached 190 million won (approximately 129,000 Euro).

Before

Hwaseomun Street, the main arterial shopping street once primarily for cars, was transformed into a street exclusively for pedestrians and ecomobile vehicles.

## After

## Results and impacts of the project in the community

A variety of programs drew visitors to the Festival neighborhood, including a vehicle exhibition, test-tracks, and vehicle tours. Over the course of a month, the EcoMobility World Festival attracted more than 1 million visitors to Haenggung-dong. Cultural activities and weekend markets further contributed to the festive mood of the month-long project. More than 20,000 visitors joined various tour programs designed to provide visitors with a thorough introduction to the neighborhood, and an in-depth understanding of applied EcoMobility.

Around 4,300 residents in the neighborhood adopted an ecomobile lifestyle to experience how traveling through integrated, socially inclusive, and healthy transport options can positively impact quality of life. Residents made use of a

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range of mobility options, including a variety of bicycles (upright, tandem, recumbent), pedelecs (electric assisted bicycles) and velo-taxis. Additionally, over 20 different companies from around the world showcased their ecofriendly vehicles, which were rented, free-of-charge, to residents and visitors.

#### Resident participation played a key role in the design

of the Festival. Keeping local residents informed and maximizing their active involvement motivated them to help create a successful Festival, which required local cooperation in order to be fully implemented. Universal access was a primary theme of the Festival. An impaired mobility tour led participants through the streets in wheelchairs and blindfolds, highlighting the experience of navigating the urban realm for sight-



impaired persons. The variety of ecomobile vehicles from ten different countries attracted great attention from visitors, who were inspired by a glimpse at the future of transport vehicles.

**Ambitious initiatives create a lasting legacy.** Upon the completion of the pilot project, the municipality and its citizens had the choice to convert the neighborhood back to its earlier form, with cars dominating streets and public space, or to make the transformation of space and infrastructure wholly or partially permanent. A citizens' round-table was hosted by Suwon City on November 13, 2013, to address the future transport policy of Haenggung-dong. Approximately 300 participants collaborated to devise speed limits, parking controls, and one-way streets to constitute their path forward in pursuit of EcoMobility, as they called for the project area to be extended to include the entirety of Haenggung-dong.

Mayor Yeom's inspirational leadership and personal enthusiasm for the Festival gave the project the energy to be carried out well, as well as helped raise residents' awareness of and commitment to the project.

## **Lessons Learned**

#### To effectively implement change in a city, consultation with the residents

**is essential.** In the initial stages of the EcoMobility World Festival, Suwon was faced with a variety of perspectives and opinions from residents who would be affected by the neighborhood transformation. The formation of a residents' group added significant strength to project. Through the intensive surveying of residents, the City was able to adapt certain changes to address local concerns, which further incentivized citizen participation. Moreover, the gradual introduction of infrastructural improvements and EcoMobility events (e.g. Car Free Day trial runs) throughout the year leading up to the Festival made for a easier transition for residents.

**Mobilize a local champion.** Identifying a local champion is integral to gaining momentum for such an endeavor. In Suwon's case, the EcoMobility initiative was a great success due to a strong foundation of political will and support from Mayor Yeom Tae-Young. Similar projects would benefit from identifying a charismatic local leader at the grassroots level to mobilize civil society. Such a figure can inspire enthusiasm in citizens and help create a guiding picture for the transformation to take place.

Logistical challenges are likely to arise when attempting a transformation of this scale. For example, the matching and allocation of vehicles to residents, and



Once the cars were removed from the neighborhood, residents reclaimed the streets and were able to move from one place to another in ways that were not previously possible.

#### **Key Contacts**

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Strategically, when closing streets to car traffic, it may be optimal to avoid key arterial routes in the city to encourage better public participation. Suwon experienced considerable resistance to closing the main arterial street Jongjo-ro to cars because of the severe inconvenience to commuters. Cities looking to limit car traffic may be advised to start with streets that will cause less disruption if closed to cars.

#### Replication

The full support and enthusiasm of Mayor Yeom Tae-Young in promoting and implementing the EcoMobility World Festival was an essential element to its success, and the EcoMobility World Festival inspired visitors to consider implementing a Festival or similar project in their own cities.

Additionally, implementing this project required Suwon to be flexible and adaptive with their vision for the project, to ensure that the changes in Haenggung-dong were changes that the residents wanted to see. This highlights the fact that successful replication requires strong political leadership, citizen involvement and support, and a willingness of all stakeholders to think outside of the box.

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