

Circular Economy Trade Mission to Taiwan

Dates: November 2-8, 2018

Why Taiwan? Since May 2016, the implementation of a Circular Economy (CE) is part of Taiwan's national economic development policy, and the Netherlands has become *the* reference country for CE implementation in Taiwan. Taiwan government, academia and business have stepped up their initiatives to implement CE, and Dutch companies are being awarded their first CE-related contracts in Taiwan.

What is happening? The Netherlands Trade & Investment Office (NTIO) – the Dutch government representation in Taiwan – has made CE its priority for the past 3 years. In collaboration with the Taiwan Circular Economy Network (TCEN) foundation (MoU in 2015), NTIO has been sharing the Dutch experience in CE policy making and implementation. In 2017 NTIO organized in cooperation with RVO, Holland Circular Hotspot (HCH), and the City of Almere a CE Mission to Taiwan with Dutch companies in CE-related products and services. The mission resulted in project leads and cooperation agreements with local Taiwanese partners.

27 delegates from Taiwan recently joined the Holland Circular Economy Week in the Netherlands, the largest foreign delegation to join this event. Taiwan's EPA announced in June their own "Green Deal," following the Dutch model, and launched CE transition agenda's for the electronics, construction, and plastics industries. Holland Circular Hotspot signed an MoU with TCEN to strengthen CE cooperation between both countries.

Taiwan government is incorporating CE in public construction projects: Taipei Mayor Ko, Wenje announced after his recent visit to the Netherlands that Taipei City Government has started implementing CE principles in public/social housing projects: a CE-building consultancy tender project was awarded to a Taiwanese – Dutch consultancy partnership, and it has announced that more projects are in the pipeline. State-owned enterprise Taiwan Sugar Corporation (TaiSugar) launched Taiwan's first CE-based residential housing project Shalun (final entry list of the World Architecture Festival Awards). TaiSugar has also started to transform their pig farms to turn bio-waste into biogas (electricity) and feedstock.

Taiwanese companies have launched CE-based products and services in many industries and areas, such as in product design (Renato Lab), new textile fabrics (Singtex), water recycling (TSMC, Delta Electronics), plastics upcycling (Da-Fong, Miniwiz), bio-waste upcycling (KGBio, Body Organ Biomedical), and biking-as-a-service (Ubike system), and many more. Dutch consultancy Metabolic will be conducting a circular scan for the textile industry in Taiwan.

CE-built Holland Pavilion in Taichung NTIO - in close cooperation with the City Almere and the City of Taichung – will host the Holland Pavilion at the Taichung World Flora Expo in Taichung, Taiwan, from November 3 2018 until April 24 2019 (6 months). Themed "Growing Green Cities" and following the concept of the Floriade 2022 expo in Almere, the Holland Pavilion will be circular-built and the first show case in Taiwan in CE-based construction. Main Dutch business partners and sponsors include Signify (former Philips Lighting), AkzoNobel, DSM, and ING Bank. Taiwanese partners and sponsors include TaiSugar, MIN & JCS Architects, People's Steel, GreenPros, FengChia University and many material suppliers.

Trade Mission in CE Construction and Agriculture: Together with Almere City Government and RVO, NTIO will host a Trade Mission in CE Construction and Agriculture to Taiwan during the opening week of the Expo, from November 2 to 8, 2018. Delegation is led Almere Mayor Franc Weerwind, and will include Dutch companies with CE-related products and services, as well as project partners Signify, AkzoNobel, DSM and ING Bank. The mission program focuses on matchmaking and networking with all relevant partners and stakeholders in Taiwan, with the objective to create new business opportunities and/or partnerships with Taiwanese companies.

CE Market Study: In preparation of the Mission, NTIO in cooperation with RVO has commissioned a CE Market Study to identify the business opportunities for Dutch companies. The main conclusions and recommendations are listed below.

Business Opportunities for Dutch Companies:

- **Construction industry:**
 - **Social housing projects:** Taipei City Government (TCG) will incorporate circular procurement into its upcoming public tenders for social housing projects. There are 35 project sites, more than 13,000 household units, in their pipeline. Furthermore, TCG announced is planning to renovate more than 200 schools in order to adopt the demographic change towards aging society.
 - Other Taiwanese cities including Taoyuan, Taichung and Kaohsiung are also planning to incorporate CE-building principles in their public procurement and urban planning projects.
 - Business opportunities: circular consultancy, architecture, circular design, lighting, carpeting, furniture & appliance leasing, financing, upcycling of used construction materials, material bank systems, smart building management, and other construction-related businesses.

- **Agricultural waste management:**
 - **Upgrading incinerators:** The Taiwan Environmental Protection Administration (EPA), together with local government, are upgrading their incinerators to be more energy-efficient and to build biomass waste-to-energy facilities for the agriculture and food industry.
 - **Pig farm transformation:** TaiSugar has started to transform their pig farms to turn bio-waste into biogas (electricity) and feedstock, and there are 16 farms in the pipeline to be transformed.
 - **Bio-refinery:** TaiSugar is Taiwan's largest landowner and has massive agriculture waste. It is looking business partners to build a bio-refinery.
 - **Agro-waste to energy:** The Taiwan Council of Agriculture has just relaxed the regulations and to encourage farmers to turn agricultural waste into energy fuels, to set up the co-fermentation (co-compost) processing centre to transform livestock manure and fruit & vegetable farm waste into energy fuels.
 - Business opportunities: circular design, bio-waste to energy, wastewater recovering and material extraction, bio-waste upcycling, bio-refinery (integrated biomass conversion equipment and technology), and other related businesses.

Trade Mission Highlights:

Meeting potential partners face-to-face is crucial to business success in Taiwan. We can help you meet your business objectives by designing a business itinerary tailored to your company's specific needs.

Dutch participants are able to pitch their technology and services to the audiences in Taiwan and have the opportunity to visit various cities in Taiwan, including Taipei, Taoyuan, Taichung, Tainan and Kaohsiung.

Trade mission participants will join the activities and receive the following services:

1. **Business matchmaking** - Business meetings with potential partners that meet your criteria
2. **Conference & seminars** on CE construction and agricultural waste management systems, with Taiwan leaders of government (central and local), academia and industry participating.
3. **Site visits and in-depth meetings** with TaiSugar, green energy science parks and potential partner companies.

4. **Networking events**- opportunities to network with the Taiwan business community and relevant government officials.
5. **Media exposure** – Extensive media attention is expected for Dutch CE delegation.
6. **Promotion materials & social media**: Listing of your company profile in our trade mission brochure, and promotion of your company via NTIO social media (FB, LinkedIn, Twitter).
7. **Assistance before, during and after the mission**

Early October a preparatory meeting will be organized for all participants and delegation leader to meet, as well as to fine tune the program to meet the individual needs. This event will be organized in collaboration with RVO, NTIO and Almere City Government.

Interested to join?

You can contact Mr. Olaf Blaauw, our temporary liaison for this project: info@olafblaauw.com.

Tentative visiting program for the Dutch Circular Economy Mission to Taiwan, November 2nd – 8th, 2018

Date/Time	Program Highlights
Fri. Nov. 2, 2018 Night	<ul style="list-style-type: none"> - NL delegation arrives at Taoyuan Int’l Airport in the afternoon and transfer to Taichung - 【Welcome Reception】 by Taichung City Government
Sat. Nov. 3, 2018 Morning Afternoon Night	<p><u>Taichung City</u></p> <ul style="list-style-type: none"> - Press conference: Taichung World Flora Exposition ‘Taichung Declaration’ by Taichung City Government - 【VIP Tour】 Visiting Taichung World Flora Exposition – Forest Park (President, Mayors, & VIPs) - 【Networking Event】 at the circular-built Holland Pavilion - 【Program briefing】 at the circular-built Holland Pavilion - 【Opening Ceremony】 of Taichung World Flora Exposition by Taichung City Government
Sun. Nov. 4, 2018	<ul style="list-style-type: none"> - City Tour in Taichung + Flora Expo visit (or time for private appointment)
Mon. Nov. 5, 2018 Morning Afternoon Night	<p><u>Taichung City</u></p> <ul style="list-style-type: none"> - 【Meeting with Taichung Mayor Mr. Lin Chia-lung】 - 【Sustainable City Conference】 - Networking Lunch - 【Taiwan – Netherlands Partnerships in Circular Economy Conference】 (Best practices in circular construction and circular agriculture) - Transfer to Tainan

Tue. Nov. 6, 2018 Morning Afternoon Night	<u>Tainan City</u> - 【 Meeting with Mayor of Tainan 】 - 【 Circular Agriculture Conference 】 - Networking Lunch at Ten Drum Restaurant (Old TaiSugar Plant) - Site Visits to Ten Drum - Transfer to Taipei
Wed. Nov. 7, 2018 Morning Afternoon Night	<u>Taipei City</u> - 【 Circular Urban Living Conference 】 - 【 Matchmaking 】 - Site Visits / Company Visits - Networking Dinner
Thu. Nov. 8, 2018 Morning Afternoon Night	<u>Taipei City</u> - 【 Meeting with Mayor of Taipei 】 - Site Visits / Company Visits - Evaluation on the Mission program - Departure for the Netherlands