

CIRCULAR BY DESIGN CHALLENGE #3

Thematic call 1: Multifunctional urban furniture

Call partners: LUGA – Luxembourg Urban Garden 2025 and Luxembourg Expo 2025 Osaka GIE

The challenge

The LUGA – Luxembourg Urban Garden 2025 exhibition and Luxembourg’s National Pavilion at the 2025 World Expo in Osaka both seek to convey a sustainable, circular image of Luxembourg. The organisers of the two events are looking for innovative, circular and sustainable solutions for multifunctional urban furniture that will contribute to limiting their ecological footprint.

LUGA 2025 will raise awareness and promote areas such as agriculture, viticulture, horticulture, green jobs, food and urban development by highlighting their local and ecological dimensions. The exhibition will take place from May to October 2025 in Luxembourg City, in the Pétrusse valley, the Parc Municipal and the districts of Clausen, Grund, Pfaffenthal, Kirchberg and Nordstad. These areas will host temporary installations, temporary gardens, events, workshops, guided tours, etc. in the public space and in partner locations. LUGA asbl is financed 50% by the City of Luxembourg and 50% by the Ministry of Agriculture, Viticulture & Rural Development.

The objective is to convey a green and sustainable image of Luxembourg. The organisers are looking for innovative solutions for temporary outdoors installations in the public space that will contribute to making this temporary event and its installations sustainable. Solutions could concern, for example:

■ **Exhibition signage**, e.g.:

- Pre-event signage: signage for future LUGA areas under construction
- Permanent signage during the 6 months of the event: directional signage guiding visitors along the exhibition route, landmark indications, information structure providing explanations of projects and gardens, etc.
- Short-term signage: signage for one-off events, etc.

Solutions must address the issue of signage in a comprehensive manner. Existing public support structures could be used, partially or in full, but this is not an obligation.

■ **Multifunctional exhibition furniture** highlighting the presence of LUGA in the public space along the exhibition route. Such furniture should be vegetated and able to function without any connection to water or electricity. It should be possible to adjust the size of each piece of furniture between 1 and 10 m². The furniture must have a multifunctional character and present one or more useful features in addition to the decorative aspect (e.g. ecological, functional (benches, bicycle stands, etc.), educational, etc.). Submissions should respect the graphic charter of LUGA.

Water management of plantations: Plants are one of the central elements of the exhibition. Finding sustainable solutions for the water management and consumption of plantations is therefore crucial.

For all above-mentioned items, a concept following the strategy “Designed in Luxembourg, built in Luxembourg or Greater Region” will be privileged. Making these items circular is crucial.

Luxembourg’s national pavilion at the 2025 World Expo in Osaka is organised by the Economic Interest Group (GIE) Luxembourg @ Expo 2025 Osaka, a partnership between the Ministry of the Economy and the Luxembourg Chamber of Commerce. The pavilion, which is designed by the architects *SteinmetzDeMeyer (STDM)* and the scenographer *jangled nerves*, will be built according to the principles of the circular economy with a smart use of

construction materials. It will host a permanent exhibition giving in-depth information and insights about Luxembourg, its people and its economy. Temporary exhibitions, cultural events, activations, a food outlet and a shop will bring Luxembourg's culture, heritage and innovative spirit closer to the 28 million visitors expected to visit Expo 2025 Osaka. The pavilion will be open from 13 April to 13 October 2025.

Organised under the theme "Designing Future Society for Our Lives", Expo 2025 Osaka will provide a unique opportunity for Luxembourg to position itself as a pioneer in circularity and a leader in sustainable growth. Luxembourg @ Expo 2025 Osaka GIE is looking for circular solutions that can contribute to making this temporary event and its overall operation more sustainable. Regarding the furniture used at the Luxembourg pavilion, the following items are foreseen:

- **36 outdoor chairs and 40 indoor chairs:** The outdoor chairs are part of the setting of an inner courtyard where visitors can enjoy their food taken from the food outlet or just chill and take a rest. The indoor chairs are meant to be used as conference chairs or dining chairs during banquets.
- **10 outdoor tables:** The outdoor tables will be installed in the inner courtyard and enhance the restaurant lounge feeling along with the outdoor chairs.
- **2 welcome / speaker desks:** Those desks will be placed at the entrance of the pavilion and in the multifunction room which will serve as an event space for conferences, workshops and concerts.
- **4 outdoor benches:** To be placed in the queuing area.
- **3 waste bin container systems:** The waste bin systems should respect the latest legal requirements in Japan and take into consideration the cultural mindset with regard to waste. These systems should also highlight the importance of reducing waste in general while showing that waste can be a resource. Making these items circular is crucial.
- **1 "LuXembourg" signage:** This signage will highlight the presence of Luxembourg at Expo 2025 Osaka in front of the pavilion and must make use of the Luxembourg nation branding.

Submissions should respect the general look and the philosophy of the pavilion design concept established by STDm. For all above-mentioned items, a concept following the strategy "Designed in Luxembourg, built in Japan" will be privileged.

Specific requirements

LUGA and Luxembourg @ Expo 2025 Osaka are looking for concrete solutions that **could potentially be implemented until April 2025** and used during the exhibitions. Proposed solutions should be:

- **suitable for outdoors use during a period of 6 months.** They need to be weather resistant and adapted to use without surveillance (risk for vandalism)
- **adapted to all users of public spaces**, from 5 to 99 years old. The consideration of the needs of people with reduced mobility or disabilities would be an advantage.
- **of a reasonable price** keeping in mind the cost of standard/classic solutions of this scale that would meet the same needs in order to be attractive to LUGA and Luxembourg @ Expo 2025 Osaka, but also to future events

Target companies

Any type of company is welcome to submit proposals.

