

BioBeo Interactive XR Tools

Be Earth for the Bioeconomy!



*SMARTlab IDRC @ UCD with SMARTlab national and global hubs, XR Impact, Wild Derrynane et al
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SMARTlab and the Inclusive Design Research Centre of Ireland at UCD were awarded funds from the European Commission as part of UCD's leadership of the Biobeo Project. SMARTlab was charged with creating a range of diverse XR tools suitable for learners and educators of all ages, and easily accessible on various devices. We have created this Biobeo XR Toolkit, and also provide XR training by Dr Zi Siang See as an added element as we believe strongly that communities, including children, should have the rights, access and know-how to create their own XR learning experiences. Enjoy!

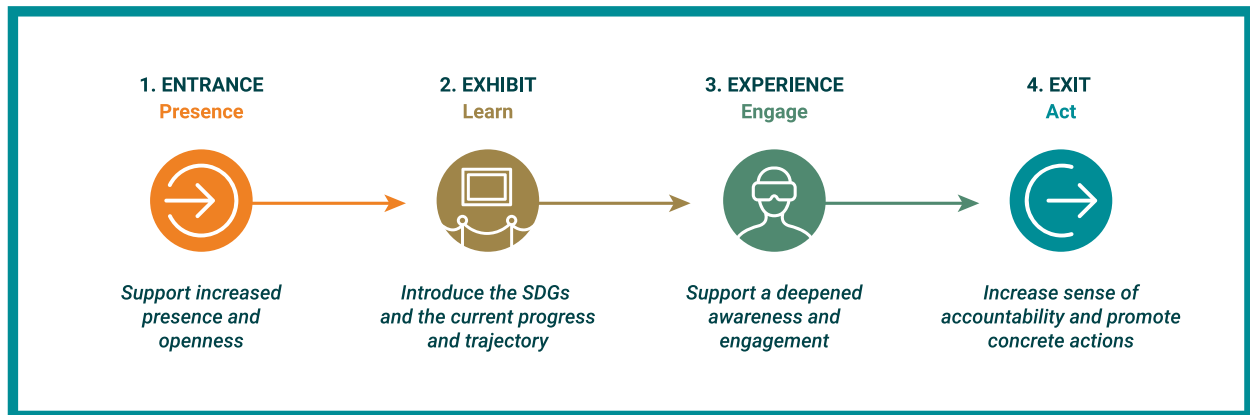
Explore the tools here!

<https://www.biobeo.eu/xr-tools/>



Our Approach:

Opening the door to experiencing the UN Sustainable Development Goals team in AR/VR content and novel tools for learners of all ages



Sustainable Development Goals

SMARTlab at UCD has co-designed and developed a platform of accessible XR tools using every available form of technical interaction, with custom build for learners of all ages and abilities.

Our XR Platform covers all five Biobeo themes and a set of the UN SDGS



Tools for the BioBeo Themes

New XR experiences were created for each of the Biobeo themes: some using screen-based AR and 360 VR interactive films, and two full VR experiences coded for Quest headsets (untethered, so no requiring heavy expensive computer equipment to share them):

Forestry



[Mindscape VR 360](#)

[Nature Cataract Gorge](#)

Food Loop



[Food Loop](#)

[Ausome Growsome Hydroponics](#)

Life Below Water



[Eco Telly](#)

[Wild Derrynane](#)

[Ocean VR Scent](#)

Outdoor Living



[Bee Hotel](#)

Interconnectedness



[Be Earth](#)

Embrace the future of learning with SMARTlab. Our accessible XR tools are designed to inspire and empower learners of all ages and abilities. Join us on a journey towards innovation, inclusion, and limitless possibilities. Discover the power of technology in education and start transforming your world today.



Be-Earth

Our first and foundational experience is Be-Earth! Created by Dr Ylva Hansdotter of XR Impact for SMARTlab@UCD, featured at Davos for the United Nations, and recoded for Quest (untethered) specially for accessibility for the Biobeo project:

Designed to open minds, unleash the imagination, spark ideas, inspire solutions and increase the sense of personal responsibility and accountability for the future of our world and humanity.

Be Earth Number 13, the original fully immersive VR experience by Dr Ylva Hansdotter of SMARTlab and XR Impact, mixes art and technology, digital and physical in a number of experiences engaging participants directly in the UN Sustainable Development Goals. The Virtual Reality platform is building experiences in support of each of the 17 goals – starting with #13: A VR experience for Climate Action: Be Earth VR.


For the Biobeo project, the full VR was recoded for use on the untethered Quest Headset and also for playing with no headset from a computer screen in 360vr format. This enables inclusive access to a wider age range of participants, from any low-tech environment as well.


Be Earth #13

The experience transports you to the Amazon Rainforest, where climate change has a clear and present impact.

In the experience, we invite you to embody Earth and – by using the powers of the earth elements – help fight further deforestation. You are the superhero of our story.

You are Earth.





The making of Be Earth #13



6 am, Stockholm, 2 am São Paulo: the team is in good spirit working towards the Davos-deadline. Development in Unity for Oculus Rift S with Leap Motion hand tracking.

With a passionate team that extended across organizations, companies, self-employed experts, artists – and time zones – many meetings ended up lasting the night through.

The journey started without us knowing if we would get funded, but we all felt it was too urgent to let go of our idea of creating the Be Earth platform. We had experienced the communicative superpowers of VR, and we felt it was almost our obligation to join the existing community of immersive creators and storytellers that are (mostly) volunteering their time to help support social change.

We started with the UN Sustainable Development Goal #13: Climate Action. Because everything starts and ends with Earth.

We are deeply grateful for everyone that is supporting us along the way with ideas, expertise, and funding. Thank you!



Ylva Hansdotter

DIRECTOR

The idea for Be Earth #13 was born the moment Ylva started working with, and researching into the positive effects of, Virtual reality.



Boo Augilar

PRODUCTION DESIGNER

The visual concept of Be Earth #13 is a primarily a product of Boo's passion and skills, and he was also a co-director of the experience.



Paulo Gibbs

3D ARTIST

The multi-talented Paulo was a 3D artist in the project and he also performed and recorded most of the music for Be Earth #13.

BE Earth 13 was recoded by Sara Lisa Vogl for BeEarth for Quest and accessible screenplay.

XR Tools in action with BioBeo community members in Brussels and Dublin, 2024

