WINTU/eR VILLAGE

An indoor Ice Rink?!

Yes indeed. That was the question we asked ourselves too, when we moved the WinTU/er Village from the outdoors into Atlas. Some of you might remember that we had a very popular ice rink in 2018 and 2019 on campus. From a community perspective an ice-rink is great. However, putting ice indoors raises questions about the energy consumption. At TU/e we practice sustainability. To make a decision, we considered the social, ecological and economic impact of an ice rink.

Social: our community likes ice skating. Young and old, students and employers, all nationalities. It's fun to do, fun to watch, great for your health and well-being. It's a great way to bring our community together. In addition, we open our ice rink to primary schools around TU/e.

Ecological: an ice rink uses energy and we did our best to minimize the use of energy. The ice rink is being powered by electricity that is generated from renewable sources, as is all electricity used at TU/e. Furthermore, we use sustainable and circular materials.

Economical: an ice rink is not cheap, but affordable plus it replaces other expenses we had during previous winter markets.

Considering all arguments, we felt that the balance of the three points pointed towards a positive answer. Especially considering our specific measures to mitigate the energy use in combination with bringing the community together.

Minimizing & Compensating Energy Consumption

We did everything to minimize energy consumption and do compensate for energy use where needed. Also, we took great care in selecting environmentally friendly and recyclable materials only.

- Additional measures include:
  - 5 cm extra insulation for optimal insulation
  - Plastic boarding and narrow entrance to keep the cold inside (it's a freezer!)
  - Energy-efficient suppliers system saves 40% energy
- Paradoxically, an ice rink uses less electricity indoors than outdoors because:
  - No wind
  - No temperature fluctuations
  - No sun
  - Placing the rink indoors makes it more energy-efficient.
- TU/e purchases all energy sustainably, meaning that this ice-rink is powered by green energy too.
- To save more energy, we opted for rink that's 30% smaller compared to outdoors.
- Since 2009, the ice supplier has been compensating the energy consumption of every European ice rink by purchasing Guarantee of Origin certificates (GvOs) from Groenbalans.
- The supplier compensates for all CO_2 emitted during all transport by purchasing carbon credits via VNV Advisory.
- The supplier employs the latest energy-efficient cooling technology, and uses alternative fuels where possible.
- All materials in this rink can be reused and recycled, there are no waste-products.

How much energy does it use?

The creation and operation of ice rinks requires energy. We are aware of the responsibility that comes with it.
But how much energy does it actually use?

- The estimated energy use for two weeks is somewhere between 4,860 and 6,480 kWh.
- That is comparable to a mid-sized stage with light and sound amplification during a two-day weekend festival that reaches the same number of participants.
- In comparison to the energy use of Atlas, which is around 3,200,000 kWh, that is 0.15% of the consumption of the entire Atlas building.