



# Sustainability of Future Colliders



Accelerators **use a lot of power and resources**, and **building them has an impact on the environment**.

Our aim as scientists (and human beings!) is to devise ways to **reduce the impact**, so we can **continue to do the physics we want** in the future.

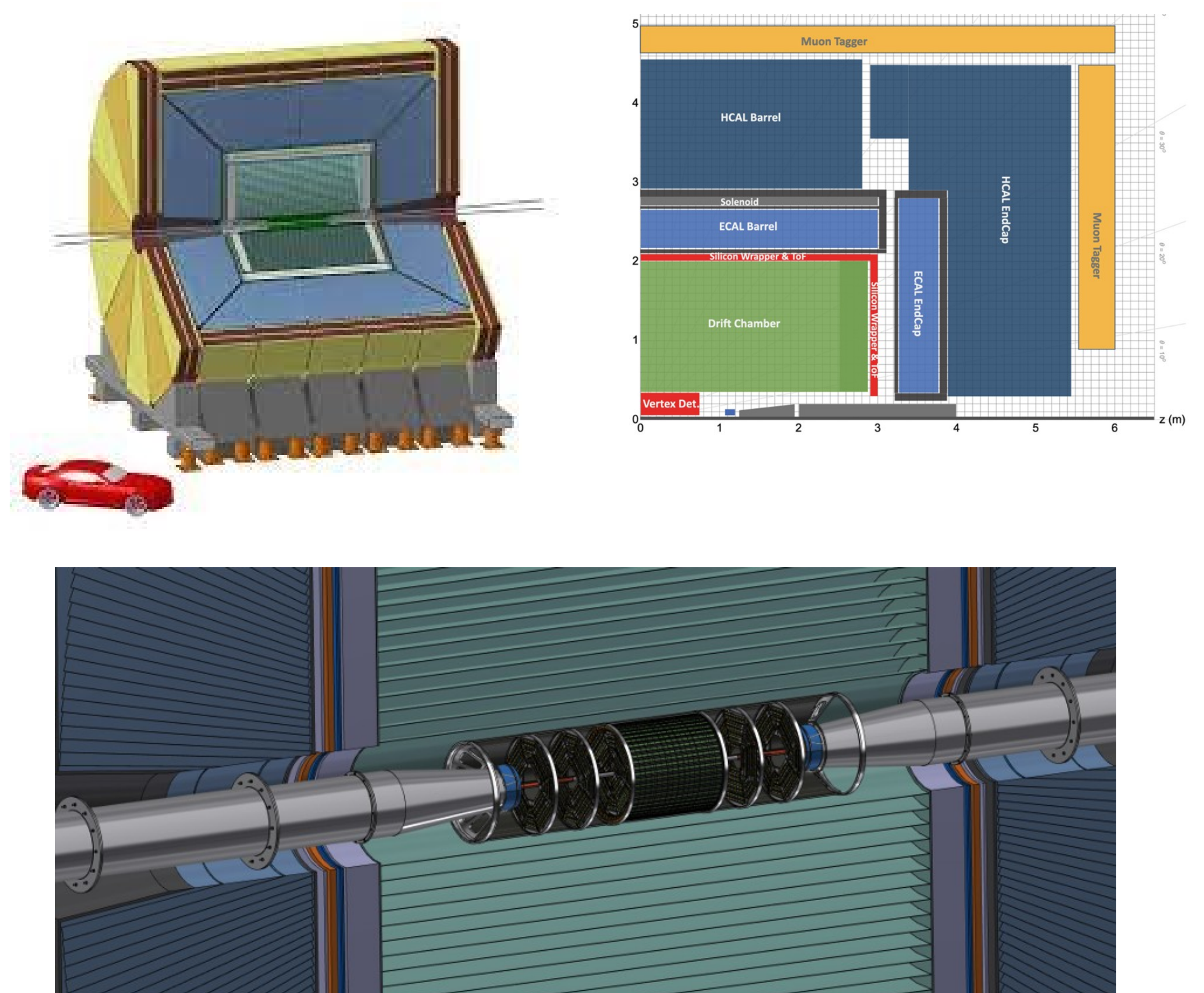
In making the decision on future colliders, we're working on sustainability in **3 main ways**:

## Making the design of the **overall system** sustainable



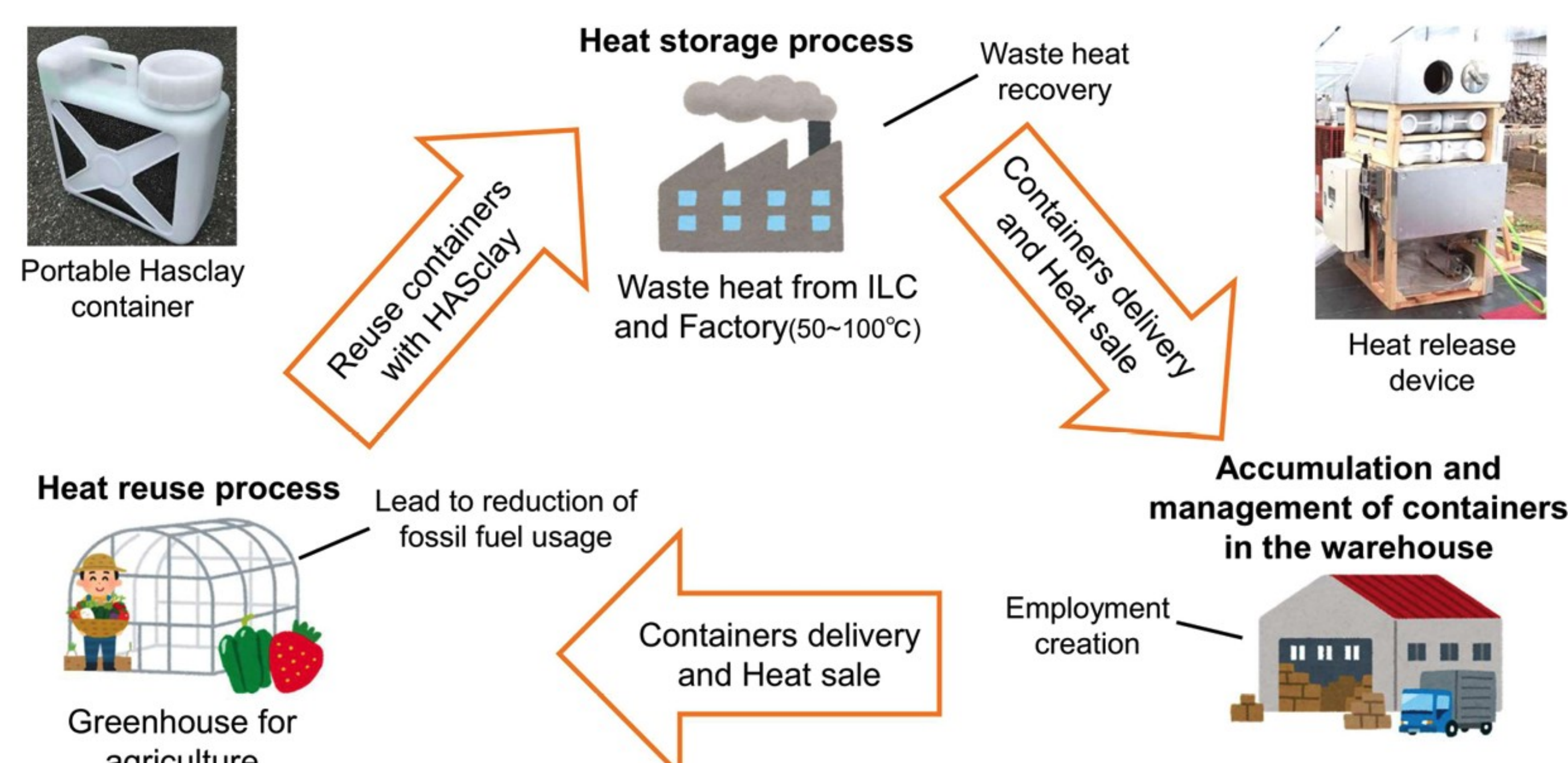
from: <https://www.nist.gov/el/systems-integration-division-73400/lifecycle-graphic>

## Making the individual **detectors** sustainable



## Making the **accelerator operations** sustainable

For example: **recover the heat exhaust** from the ILC and **create businesses** from it



from: [https://www.pasj.jp/web\\_publish/pasj2020/proceedings/PDF/WEPP/WEPP57.pdf](https://www.pasj.jp/web_publish/pasj2020/proceedings/PDF/WEPP/WEPP57.pdf)