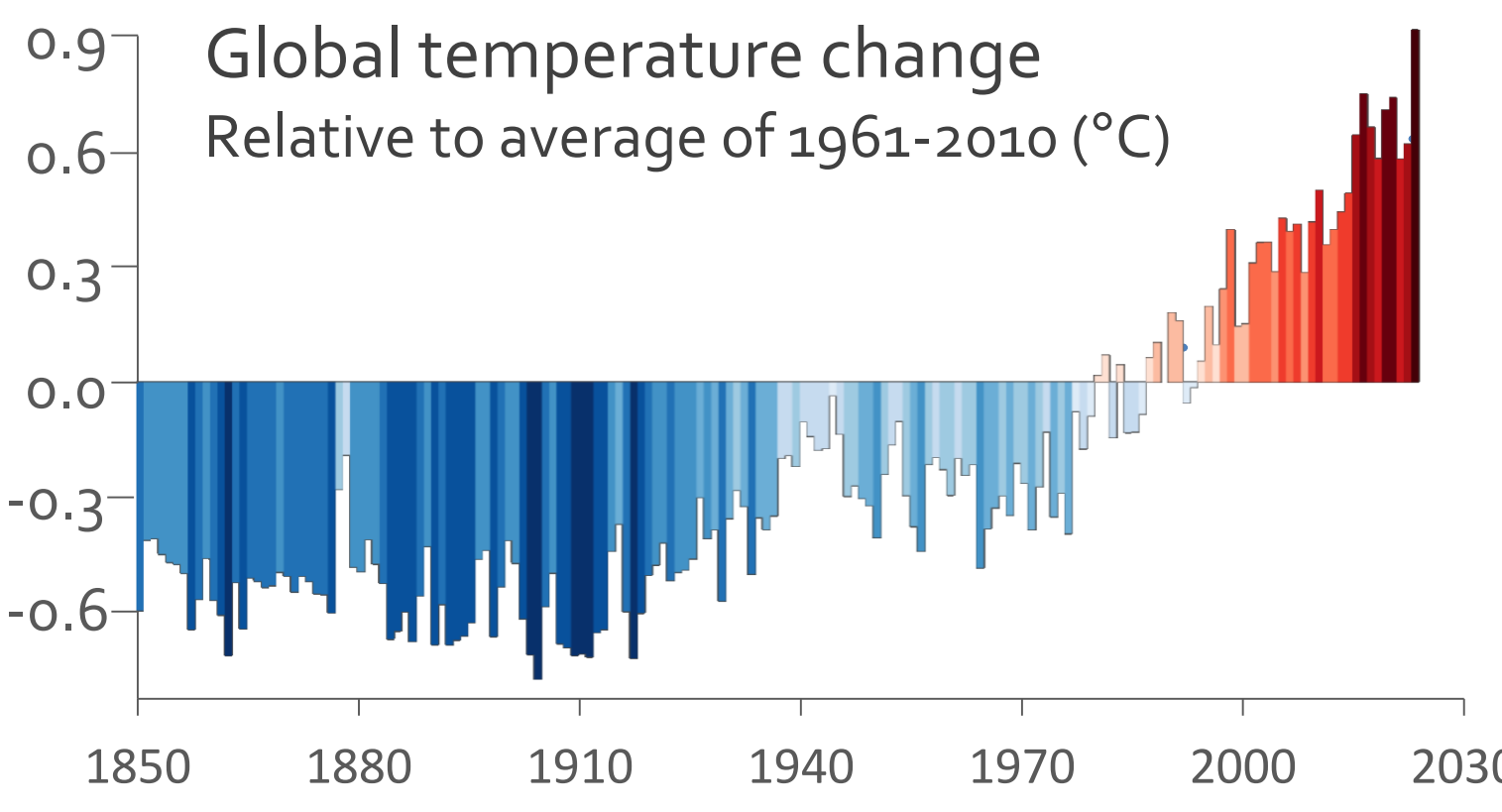
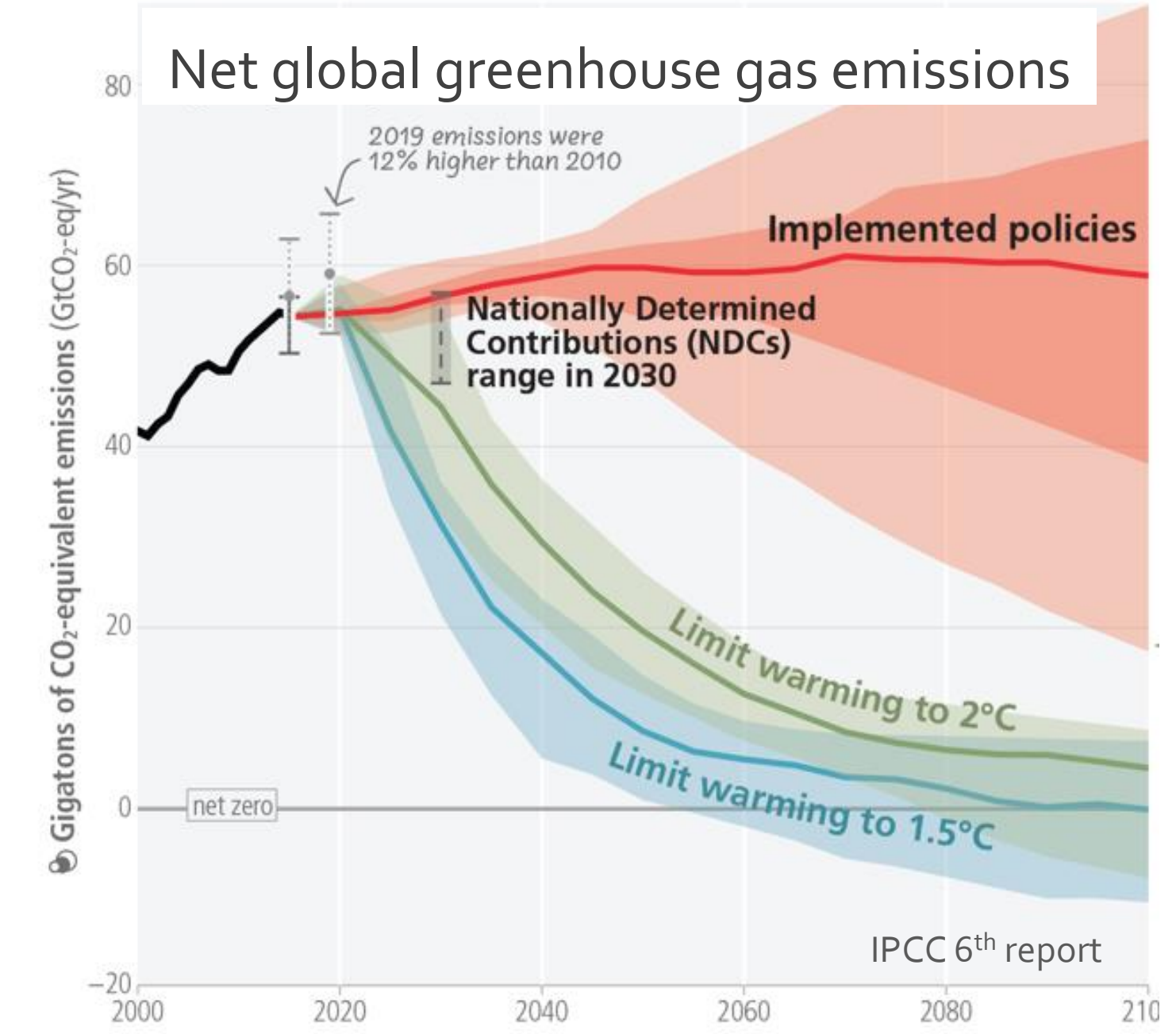
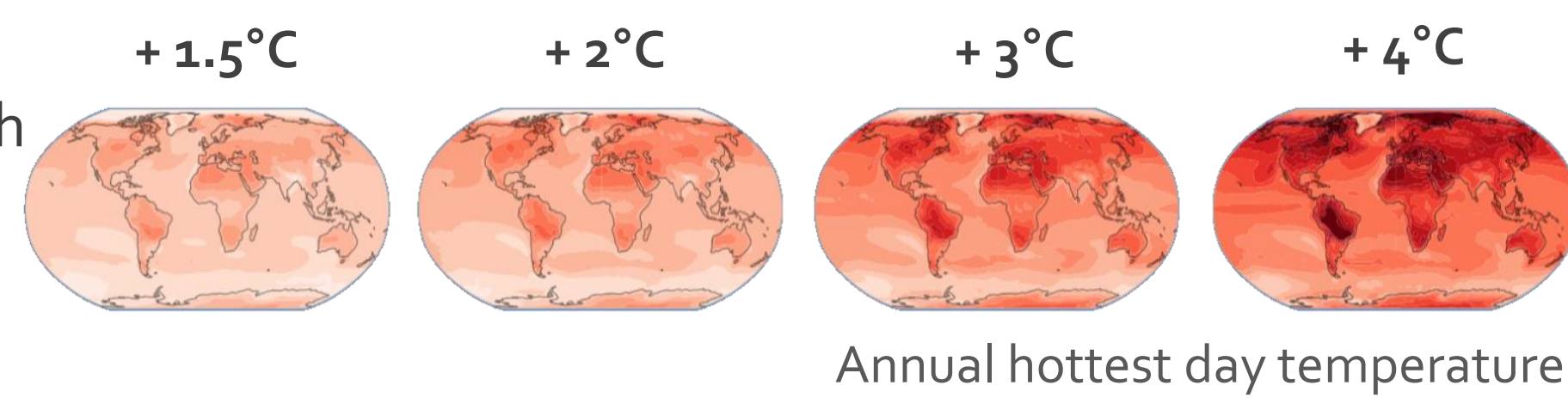


Sandrine Vadon-Le Goff - IBCP&Cie, Tissue Biology and Therapeutic Engineering Laboratory (LBTI), UMR 5305 CNRS, Université Claude Bernard Lyon 1, Lyon, France  
 Julie S. Di Martino - New York Medical College, Department of Cell Biology and Anatomy, Valhalla, NY, USA

### Global warming is accelerating and disrupting natural, social and economic equilibrium



Extremes become more widespread and pronounced with every increment of warming – IPCC 6th report (2023)



We hear it, but what do we do about it?  
 In our day-to-day work, we consume natural resources and energy, we produce greenhouse gas, we contribute to the pressure on the environment.  
 But as scientists in today's society, we have the responsibility to integrate these issues into our research and to work toward greener practices.

### So, how can we reduce the environmental footprint of our research?

### Doing research in a world in transition

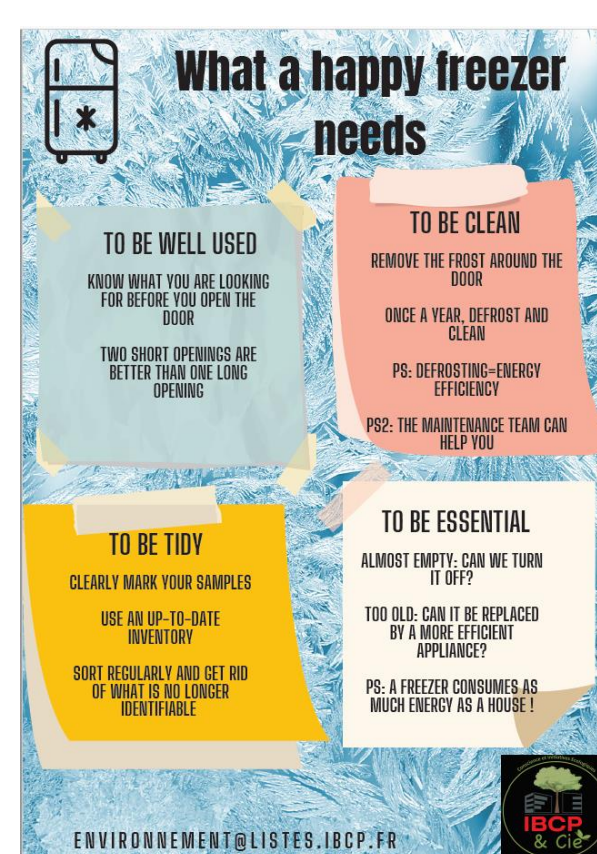
Two examples:

- One institute in Lyon (France) – 250 people
- One lab in New York (USA) – 5 to 20+ people

A common approach :

Evaluate Communicate Act

### Communicate



Newsletters to get new ideas:



### Conclusion

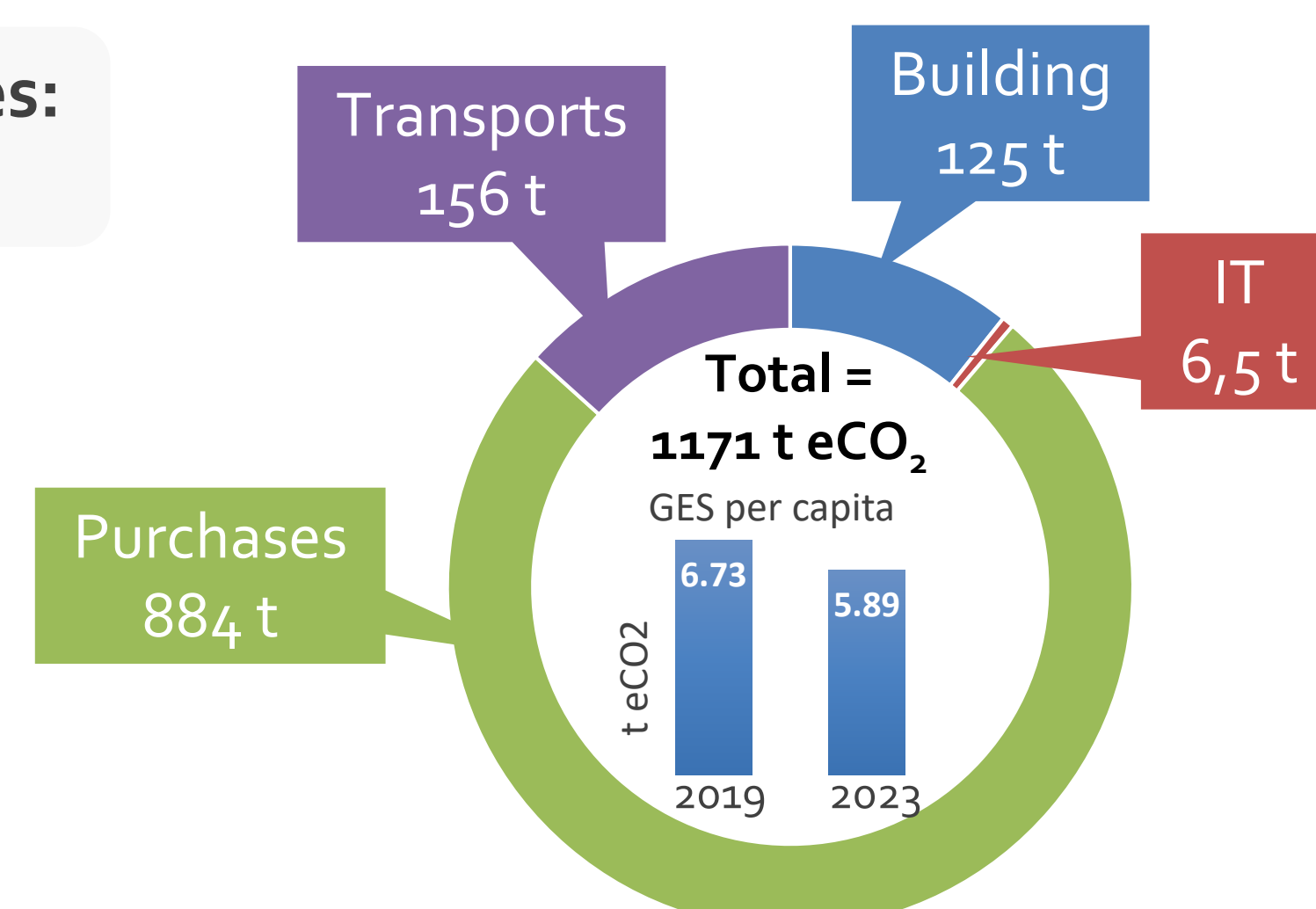
While the initial steps towards sustainability are relatively straightforward, the real challenge lies in raising staff awareness and actively involving all of us in transforming experimental practices.  
 One of the most effective ways to advance is by **sharing best practices between labs**.  
 This not only fosters a spirit of collaboration but also encourages the exchange of innovative ideas.

And, together, let's build a greener ECM community!

### Evaluate

Paris agreement objectives:  
 2 t eCO<sub>2</sub>/person/year

Consumables account for 42% of the emissions of the lab !



Using Labos 1point5 methodology, IBCP&Cie calculated the carbon footprint of the institute

<https://labos1point5.org/>

### Act : the 3 R rule – some examples

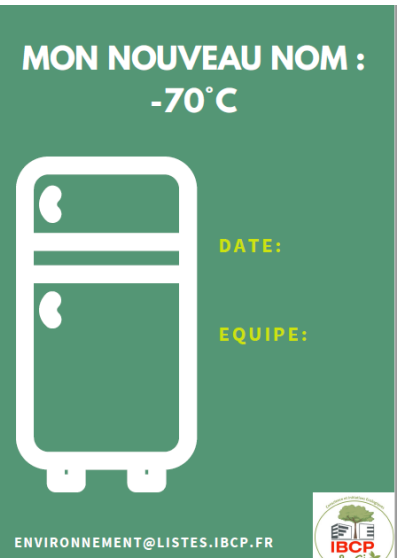
#### Reduce

Think twice: is this (experiment / material etc.) really needed ?

**Reduce water consumption:** more efficient ultrapure water system aerators on faucets

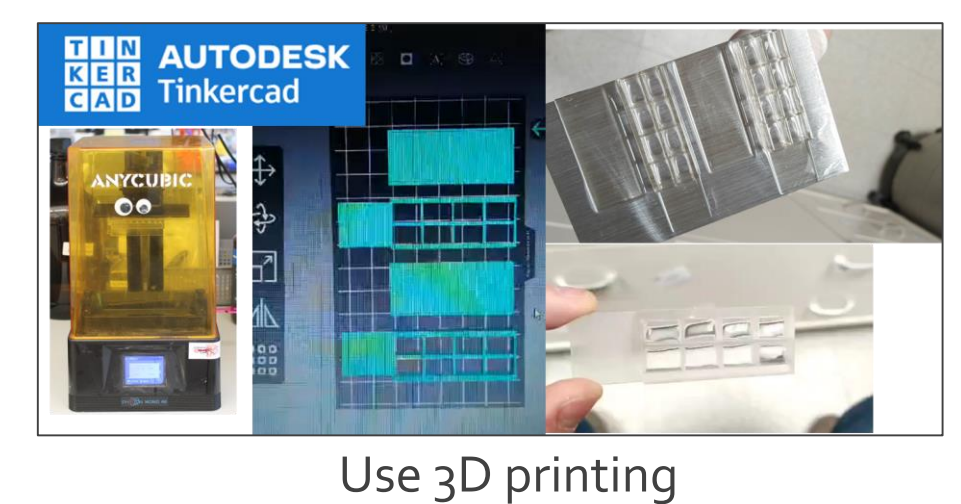
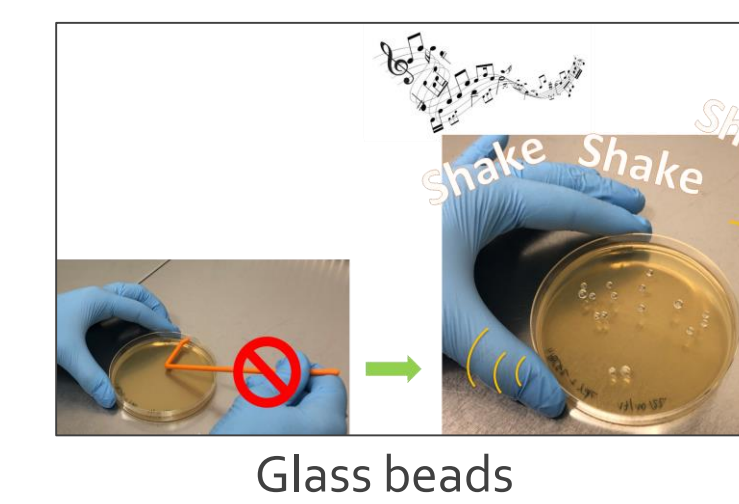
**Reduce energy consumption:** freezer challenge reduce autoclaving promote sustainable transportation

**Reduce consumables:** share chemicals share / repair small equipment buy bulk not single use



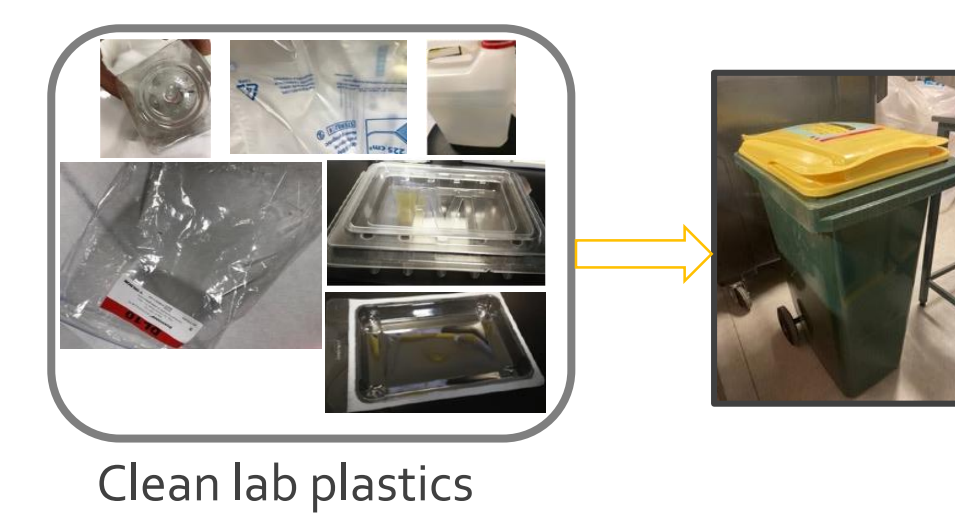
#### Reuse/Replace

replace single use plastics for glass  
 reuse  
 buy bulk  
 make your own



#### Recycle

all that can be recycled  
 find new recycling circuits



### Act : Get creative and Upcycle!

