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# **Education for green transition**

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# Six blind-folded persons and the elephant



# Life Cycle Assessment





## Is palm biodiesel good for the environment?

» If we consider only GHG emissions and energy, biodiesel is far superior to fossil diesel



Lecksiwilai N., Gheewala, S.H. (2020), Sustainable Production and Consumption, Vol. 22, pp. 177-185



### Is palm biodiesel good for the environment?

» Diesel has lower total impact score (around 15%) even though having high GHG and energy resource impacts.



### Are reusable cups better than single-use ones?









Single-use PP cup

Single-use PET cup

Single-use PLA cup

Multiple-use SS cup

Changwichan K., Gheewala, S.H. (2020) Choice of materials for takeaway beverage cups towards a circular economy, Sustainable Production and Consumption, Vol. 22, pp. 34-44

### How many times must a reusable cup be reused?



### **Recycling should not be an afterthought**





# **Recycling aluminium?**



# **Reusing/recycling glass?**





#### https://time.com/5930093/amsterdam-doughnut-economics/

### **Important messages**

<u>Life cycle thinking/systems solutions</u>

• <u>Mindfulness</u> over tokenism

 <u>Environmental pragmatism</u> over environmental extremism

<u>Sustainable consumption</u> is a must – lifestyle changes