



**The Stone Soup Leadership Institute's BETA Program
Redwood High School Environmental Science & Tech Program**

**Francois van den Abeele – Sea2see
Sustainable Business**

1. Introductions/Synopsis

5 Minutes

- Read Synopsis of the story
- Watch this video about Sea2see and how they are making an impact on plastic reduction:
https://www.youtube.com/watch?v=EckHCt5E_I

2. Language Arts

10 minutes

- Sea2See created their business on the principal of **WAVES**. Review this principal and why this model has helped Sea2see become successful.
 1. **Waste:** Where most people see waste, Sea2see sees raw material to be reused
 2. **Awareness:** Education and understanding is important to transform people's perception of waste.
 3. **Value:** Properly collected and selected waste becomes valuable in the fight to reduce marine plastic
 4. **Earnings:** Collectors of plastic have a new source of income as they assist in saving marine life (5 kg of waste = 1€)
 5. **Solution:** Strategies for reducing plastic and cleaner coastal environments create a more sustainable supply chain for all marine industries

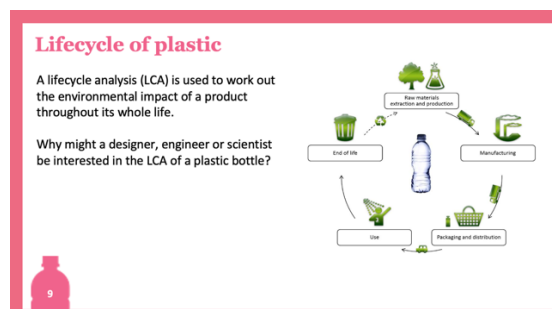
3. STEM Activities

10-20 minutes

- Plastic Lifecycle Analysis:

This activity helps students understand how plastics are made and the environmental impact they cause at different stages of the lifecycle. This can be done in groups or as a class.

1. Hand out an empty plastic bottle and a set of the lifecycle analysis cards to each group. Allow a few minutes for the students to arrange the cards in a way that tells the story of the plastic bottle from beginning to end.
2. Pass out the lifecycle analysis sheet and introduce the idea that carrying out a lifecycle analysis is a good of identifying how and where a product causes environmental impact.
3. Discuss the questions about ways to reduce the environmental impact of the plastic bottle.
4. Optionally, you might want to extend their thinking by using the 4Rs to help identify areas to reduce environmental impact.



4Rs: Rethink, Reduce, Reuse, Recycle

Rethink: Do we need to use plastic bottles at all? What could we use instead? Can we use other raw materials to make plastic?

Reduce: Can we use less material or energy to make the bottles? i.e.: thinner plastic

Reuse: Can we reuse a plastic bottle? How can we make that safe? What could we do to encourage people to reuse a bottle?

Recycle: Can we encourage people to recycle more plastic bottles? Can a bottle be designed in a way to make recycling easier which would improve the efficacy of recycling? i.e.: use single plastics.

Solutions:

1. Oil is extracted
2. Barrel of oil
3. Oil made into pellets
4. Pellets melted to form plastic bottles and lids
5. Bottles filled with water
6. Bottles wrapped with plastic label
7. Bottle transported to shops
8. Shop
9. Used bottles
10. Recycling bin OR bin --> landfill

4. Sustainable Career Pathways

10 minutes

• Sustainability Certificates

Small Business and Entrepreneurial Management Certificate <https://catalog.bristolcc.edu/business/small-business-and-entrepreneurial-management-certificate>

• Sustainable Career Pathways

Sustainable Entrepreneur: Sustainable Entrepreneurs participate in the development of sustainability innovations that aim to generate new products, services, production processes and organizational models which substantially reduce social and environmental impacts. Discuss the skills required to become a successful entrepreneur (business management, calculated risk-taking, financial literacy, marketing/sales)

Sustainable Entrepreneur Average Salary: Variable (**\$55,000-\$150,000**)

Environmental Consultant: Environmental consultants provide expert assessment and advisory services for clients on matters pertaining to the management of environmental issues. Environmental Consultants have extensive knowledge about environmental regulations and can assist clients in the private industry or public government institutions on possible fines or misguided transactions/company processes.

Environmental Consultant Average Salary: \$79,636

5. Close: Evaluation/ Writing

5 minutes

- What inspires you about Francois's story?

Stone Soup Leadership Institute

www.stonesoupleadership.org

<https://sustainwdn.com/redwood-high-school-beta/>