



SERVE THE PLANET 2018

Module 2: Study Circle Part 1

Energy Use in Daily Life: Clothing



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Outline

- ▶ Why do we wear clothes?
- ▶ Where do the fibres that make up our clothes come from?
- ▶ Lifecycle of the clothes that we wear
- ▶ Energy consumption and environmental impact of clothes
- ▶ Why do we buy more clothes than we need?
- ▶ What changes can one make?

The purpose of this study circle is to understand the impact of our clothes on the planet and how we can be more responsible to make the planet more sustainable.



Why do we wear clothes?



Physical Needs

Protection
Safety



Social Needs

Fitting in



Psychological Needs

Adornment
Cultural identity



What is the source of clothing fibres?

Natural Fibres



Cotton - cotton plant



Linen - flax plant



Wool - sheep



Cashmere - cashmere goats



Mohair - Angora goats/hairs



Silk - silkworms



Hemp - hemp plant



Leather - animal hide



Jute - jute plant



What is the source of clothing fibres? contd.



Synthetic Fibres

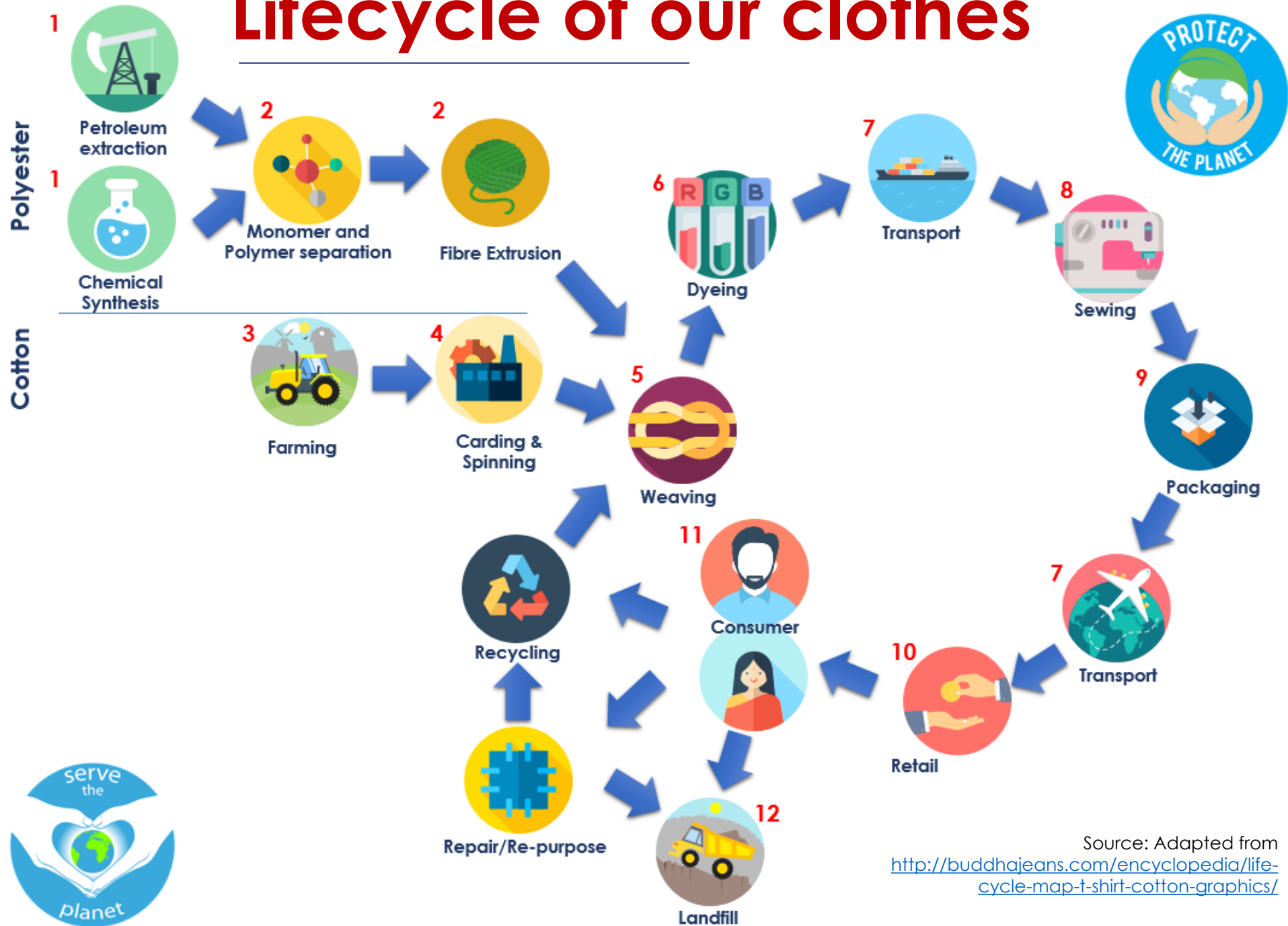
→ Rayon/ Viscose- Modified fibres from soy/ sugarcane/bamboo plants



- Polyester
- Nylon
- Spandex
- Polypropylene
- Polyethylene
- Vinyl



Lifecycle of our clothes



Source: Adapted from
<http://buddhajeans.com/encyclopedia/life-cycle-map-t-shirt-cotton-graphics/>

Energy & Resources Use in Clothing and the Environmental Impact



<https://www.youtube.com/watch?v=NXTIfcfzSnE>

Video duration – 3 mins 43 secs



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Environmental Impact of Clothes



68

POUNDS

The amount of clothing that the average American discards each year, 85% of which ends up in landfills or incinerators.



4%

The percentage of global landfills that are filled with clothing and textiles.

700
GALLONS

The amount of water it takes to produce a single cotton T-shirt.



2.6%

The percentage of global water used for growing cotton.

99%



The estimated percentage of used clothing that is recyclable.



17-20%

The estimated percentage of industrial water pollution that comes from textile dyeing and treatment.

8,000

The estimated number of synthetic chemicals that are used worldwide to turn raw materials into textiles.

60,000,000

The estimated number of people who work in the fashion industry worldwide.



Source: Conscious Company Media



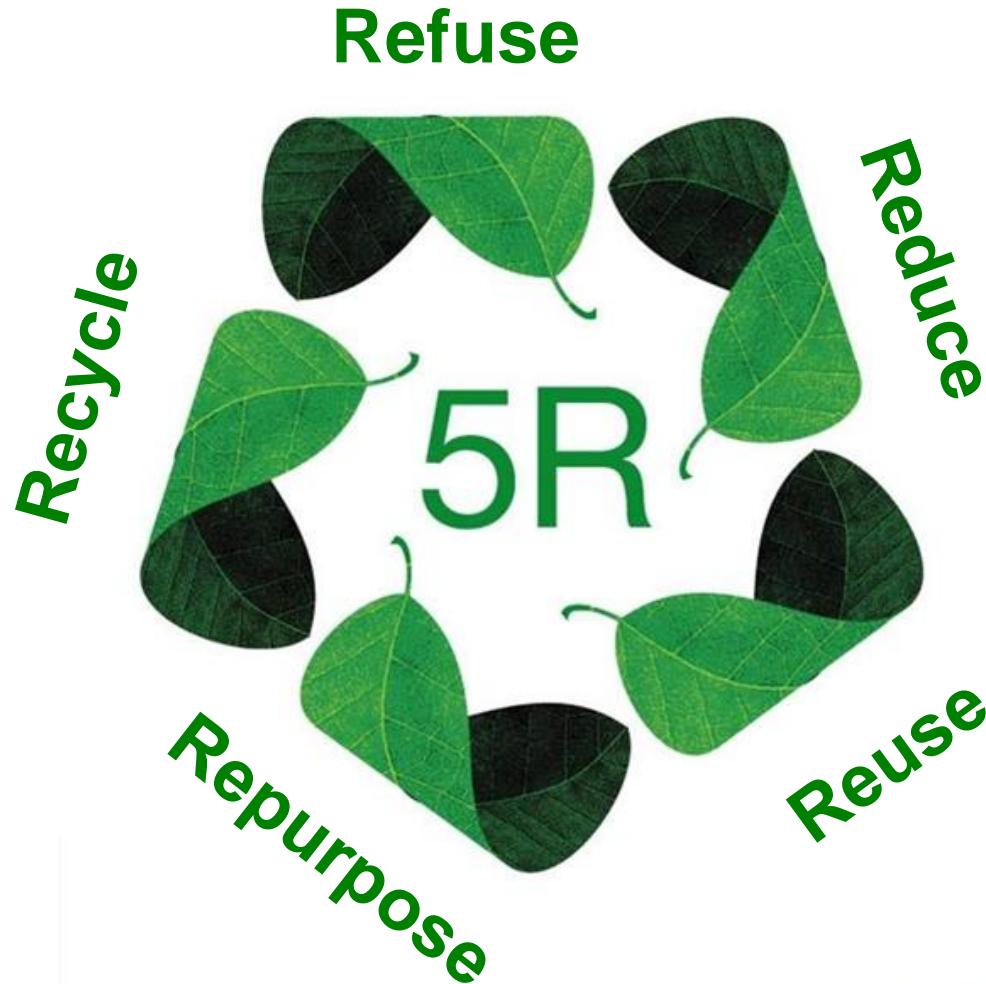
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Why do we buy more clothes than we need?

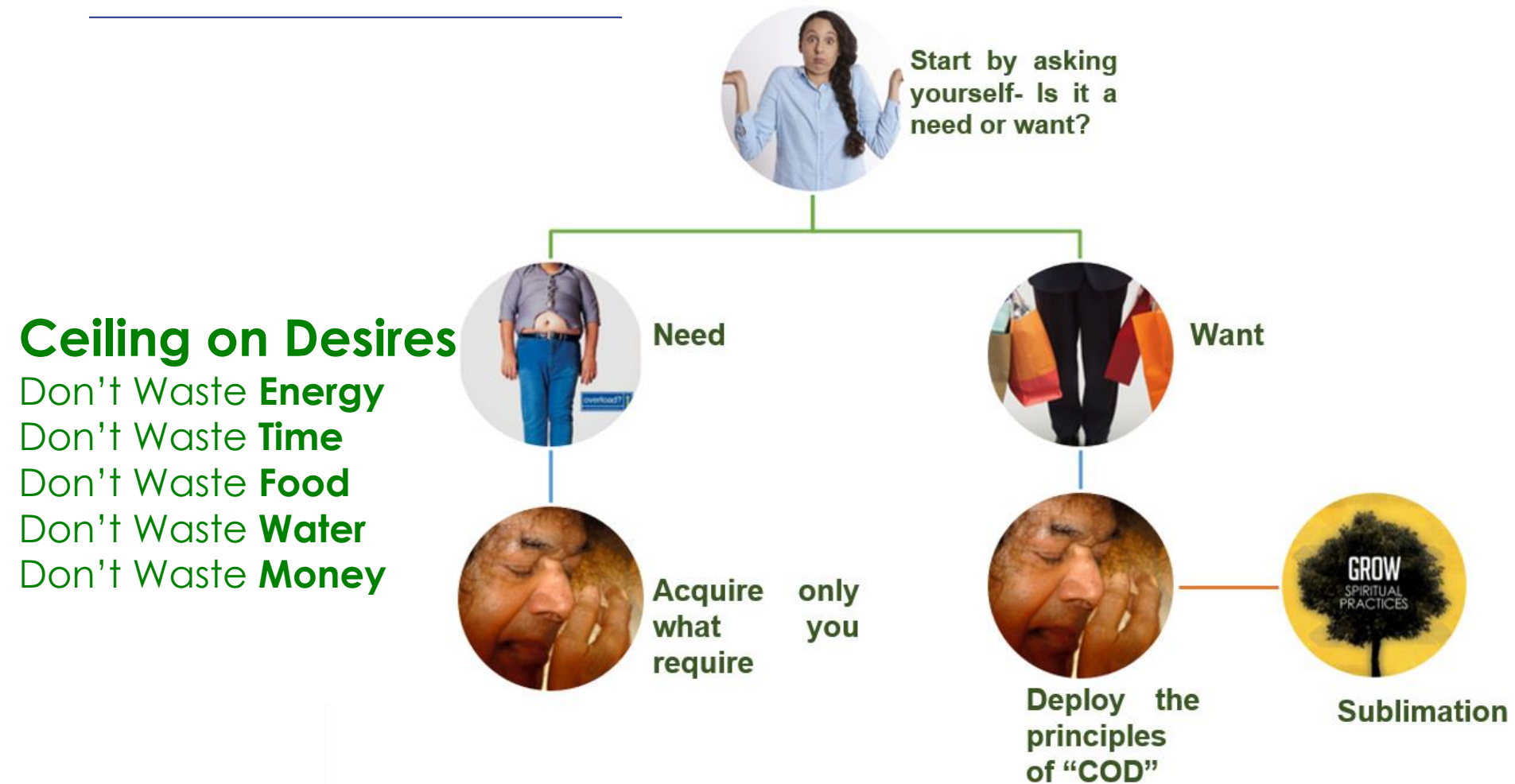


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What changes can we make?



What changes can we make? contd..



Reducing Energy Impact of Clothes

Cultivation or extraction of natural resources for production of fabrics, manufacturing, distribution and disposal - all require energy

REFUSE	REDUCE	REUSE	REPURPOSE	RECYCLE
Do I need it? Can I afford it? Will I use it? Is it worth it? Will it last longer? Can I borrow it instead?	Cut down your needs Donate	Wear handed down clothes Donate clothes to a charity that can redistribute it	Repair, alter into different style or modify it to fit a different use This video is an example: https://www.youtube.com/watch?v=DesGx5lpMWQ (Duration 1:24 minutes)	Recycle what can't be reused or repurposed - it diminishes the need for mining/ extraction of natural resources and energy use



Recap

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In PART 2 of Module 2 study circle series, we will cover: Energy & Food

- ▶ To what extent Energy is used in the 'food sector'
- ▶ How does this affect climate change and pollution, as a result of energy use?
- ▶ Are renewable sources the answer?
- ▶ What can we do daily to reduce our energy footprint in relation to food, and serve Mother Earth?

