

# Sustainability Design Goals (Environmental)

## 1. Cut down paper and cotton use

Reduce use of cotton and paper board that contribute to the OKALA score the most.

- **Strategy1:** Reduce number of materials
- **Strategy2:** Multifunctional to reduce usage of paper & cotton

◆ IMPACT MATRIX										
Paper										
	Resource Depletion	Global Warming	Ozone layer depletion	Acid rain/acidification	Solid waste	Land degradation	Water pollution	Air pollution	Reduced biodiversity	Employment creation
Raw material extraction <i>log cutting</i>	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Material processing <i>pulp, cook, beat</i>	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Component manufacturing <i>coat, print</i>	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Assembly & packaging	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

◆ IMPACT MATRIX										
Cotton										
	Resource Depletion	Global Warming	Ozone layer depletion	Acid rain/acidification	Solid waste	Land degradation	Water pollution	Air pollution	Reduced biodiversity	Employment creation
Raw material extraction <i>cultivate, harvest</i>	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Material processing <i>clean, dry</i>	◆	◆		◆	◆	◆	◆	◆	◆	◆
Component manufacturing <i>spin, weave, sew</i>	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Assembly & packaging	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

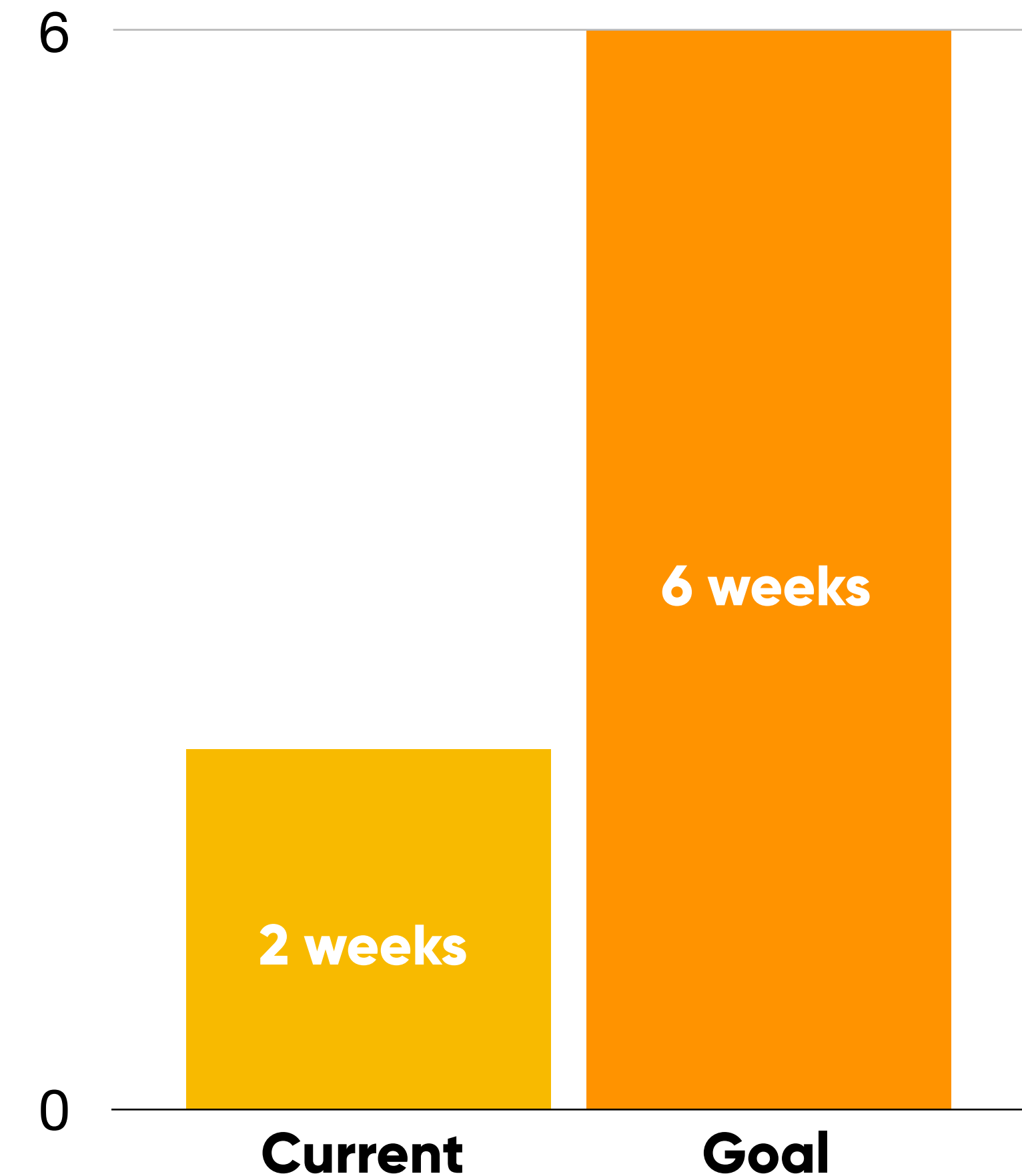
Bill of Materials	OKALA IMPACT POINTS
coated paper board	2.2
Polyethylene	0.54
Cotton	11.55
Spring steel	0.038
Water	0.0099
Ink	0.0748
Truck	0.00044
Air Freight	0.003
Electricity	4.5
Landfill(polyethylene)	29.52
Landfill(cotton)	0.00924
Landfill(paper)	0.0264

# Sustainability Design Goals (Environmental)

## 2. Extend product lifespan from 2 weeks to 6 weeks

*Encourage longer-lasting product experience, lengthening the process before discarding*

- **Strategy1:** *Making several items recyclable/ reusable*
- **Strategy2:** *Modular system/Refill*
- **Strategy3:** *Multifunction*





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## 3. Efficient Distribution

*Reduce waste and energy consumption based on transportation.*



- **Strategy1:** Localized material selection
- **Strategy2:** Collapsable

	Resource Depletion	Global Warming	Ozone layer depletion	Acid rain/acidification	Solid waste	Land degradation	Water pollution	Air pollution	Reduced biodiversity	Employment creation
Distribution & purchase	⬜	⬛	⬛	⬜	⬜	⬜	⬛	⬛	⬜	⬜
Distribution & purchase	⬜	⬛	⬛	⬛	⬛	⬜	⬛	⬛	⬛	⬜
Distribution & purchase	⬛	⬛	⬛	⬛	⬜	⬛	⬛	⬛	⬜	⬜



# Sustainability Design Goals (Social)

## 1. Create employment opportunity

*Providing employment opportunities by localizing material processing and transportation.*

- **Strategy1:** Localized material processing
- **Strategy2:** Hiring people for kit distribution, recycling and repair.

