

Squamish circular trailblazer program

Workshop 2 – July 10, 2024

SQUAMISH



AGENDA - Circular Trailblazer Workshop 2

Workshop Agenda + Program Overview
Introductions + What We've Heard
Circular Value Chain Diagnosis + How + Example
Circular Value Chain Diagnosis Exercise: Part 1 & 2
Next steps + "Homework"

Circular Trailblazer Program Overview



The Circular Trailblazer Program aims to help your business to:

1. Embrace circular practices
2. Gain business advantages
3. Advance environmental and social goals

Circular Trailblazer Program Overview



- **Kick-off Event**
- **Workshop 1**
  - Circular Economy 101 and Circular Business Advantages
- **Workshop 2 (July 10 & July 29)**
  - Circular Value Chain Diagnosis
  - Homework: Circular Value Chain Diagnosis with one-on-one check-ins
- **Workshop 3**
  - Implementation Strategies
- **Recognition Ceremony**

Five steps to circular success



Identify Circular Advantage



Diagnose Value Chain



Brainstorm Circular Strategies



Assess Circular Strategies



Plan and Implement Circular Actions

What is a circular economy?

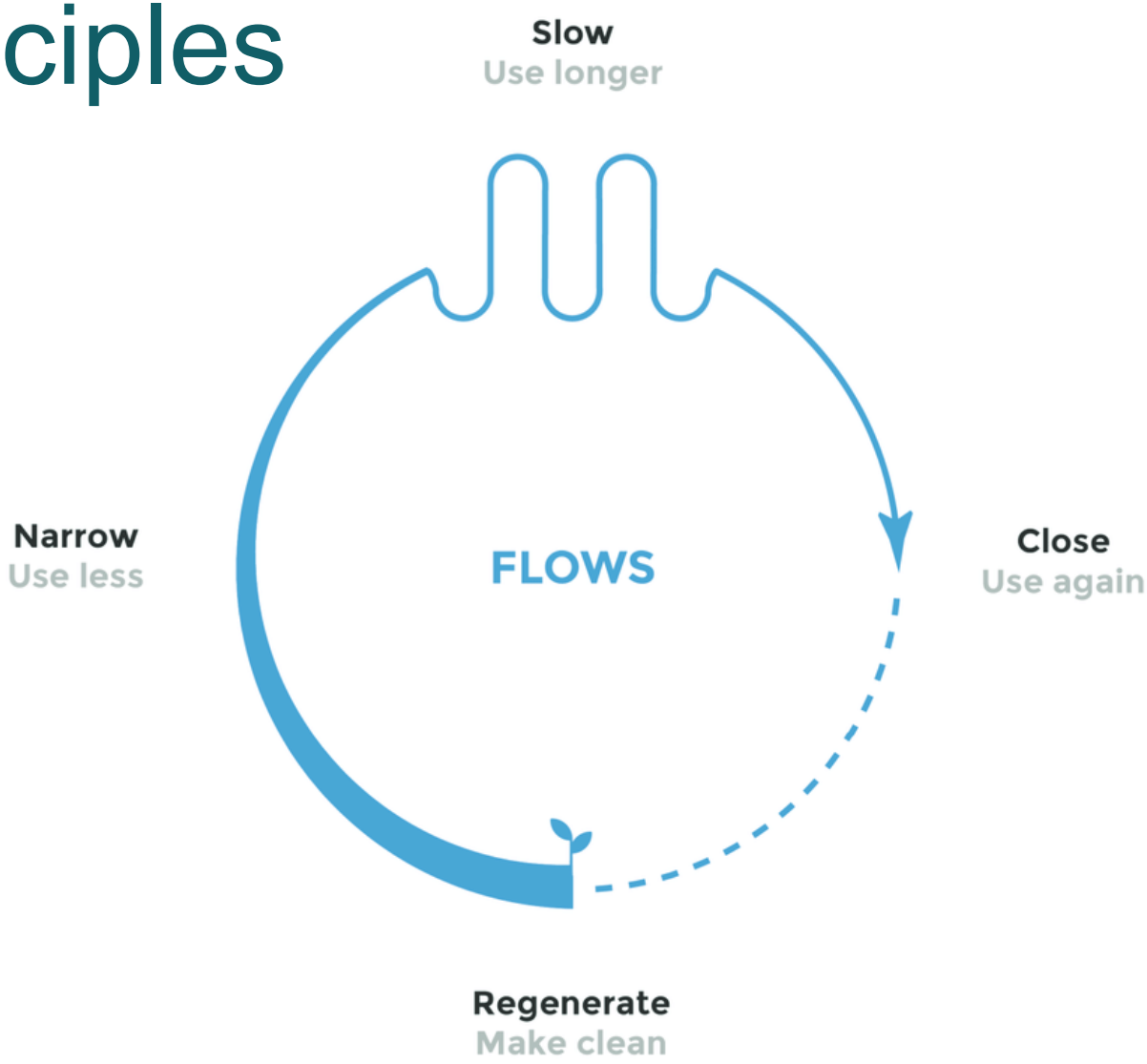




An **economic system of production and consumption** that aims to keep products, components, and materials at their **highest utility and value**.

Four Key Circular principles

- Narrow
  - Use **less** – minimize impact per product
- Slow
  - Use **longer** – extend product life
- Close
  - Use **again** – close the loop
- Regenerate
  - Make **clean** – improve the natural environment, make renewable



A Tool to Analyze, Ideate and Develop Circular Innovation Ecosystems. Sustainability Journal, 2020

Why Businesses go Circular:

To avoid linear risks

1. Supply chain shocks
2. Raw material scarcity & volatility
3. Extra costs - e.g., disposal fees
4. Negative/reduced brand reputation
5. Competitors embracing circular innovation
6. Evolving customer preference
7. Employee turnover for ”better” companies
8. Changing policies & laws

Why Businesses go Circular:

To gain circular benefits

1. Enhance supply chain resilience
2. Greater stability of material inputs & pricing
3. Save money
4. Enhance brand reputation
5. Optimize innovation opportunities
6. Improve customer loyalty & new customers
7. Attract & retain quality employees
8. Staying ahead/comply with regulations

Community Agreements

And...

- Respect
- Openness
- Take care to claim our opinions
- Enjoy!
- Assume good intentions
- Others?



Introductions

- Name, organization
- What does your business/organization do?



Your circular advantage check in

- Key risks and benefits to address
- Initial circular ideas

Circular Value Chain Diagnosis



What Circular STRATEGIES Are a Good Fit?

Narrow – Use Less

- Material Efficiency & Substitution
- Circular Design
- Circular Business Models

Slow – Use Longer

- Repair & Care Services, Education
- Takeback, Resale
- Upcycle, Refurbish, Remanufacture

Close – Use Again

- End of Life Materials as Resources
- Organic Materials Management
- Recycle

Regenerate – Make Clean

- Use Non-Toxic Materials
- Use Renewable Energy & Materials
- Regenerate Natural Systems

Circular value chain diagnosis

- Step 1: Draw value chain
  Value chain (black), key actors (blue)
- Step 2: Map untapped circular value
  (grey or brown)
- Step 3: List or map pain points
  (red or orange)
- Step 4: Map potential circular strategies
  (green)

Keep in Mind

- Product or Service
  - You can focus on a product, product line, product or service category or an entire business or organization
- Focus In
  - A smaller focus is often easier and can flow from your linear risk and circular benefits assessment (workshop 1)
- Keep Analysis Simple
  - Your analysis should not be exhaustive – it's a strategic thinking exercise to help you identify opportunities worthy of further exploration
- Add Detail As Needed
  - You can, if necessary, follow up with more detailed waste audits but it's not always necessary to identify circular opportunities

Step 1a: Draw Your Own Value Chain



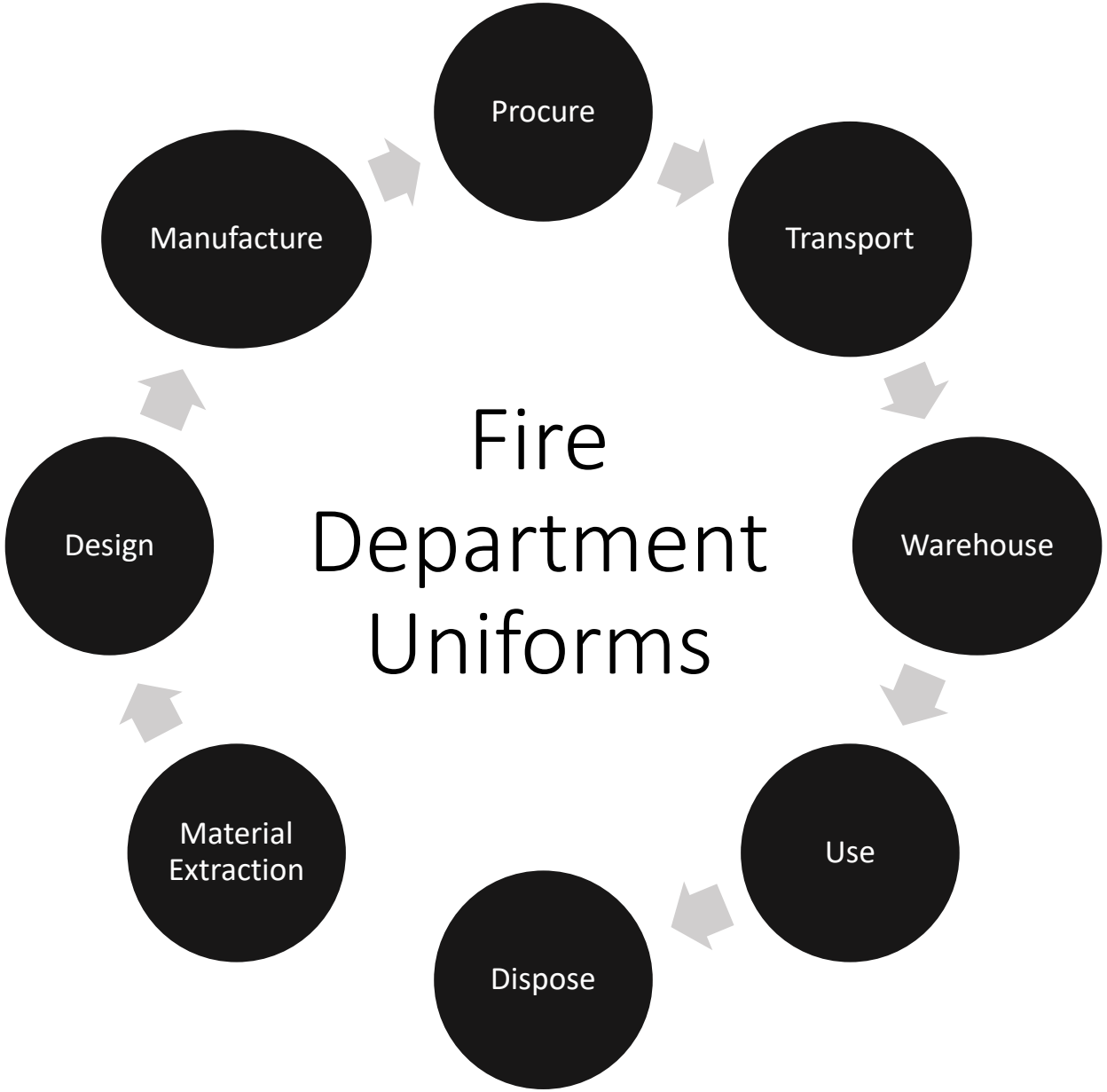
Use this diagram as a starting point.

Draw key boxes for each part of your value chain.

Spread the boxes out in a circle with some space.

Value Chain

Fire Department Uniforms



Step 1b: Identify Key ACTORS

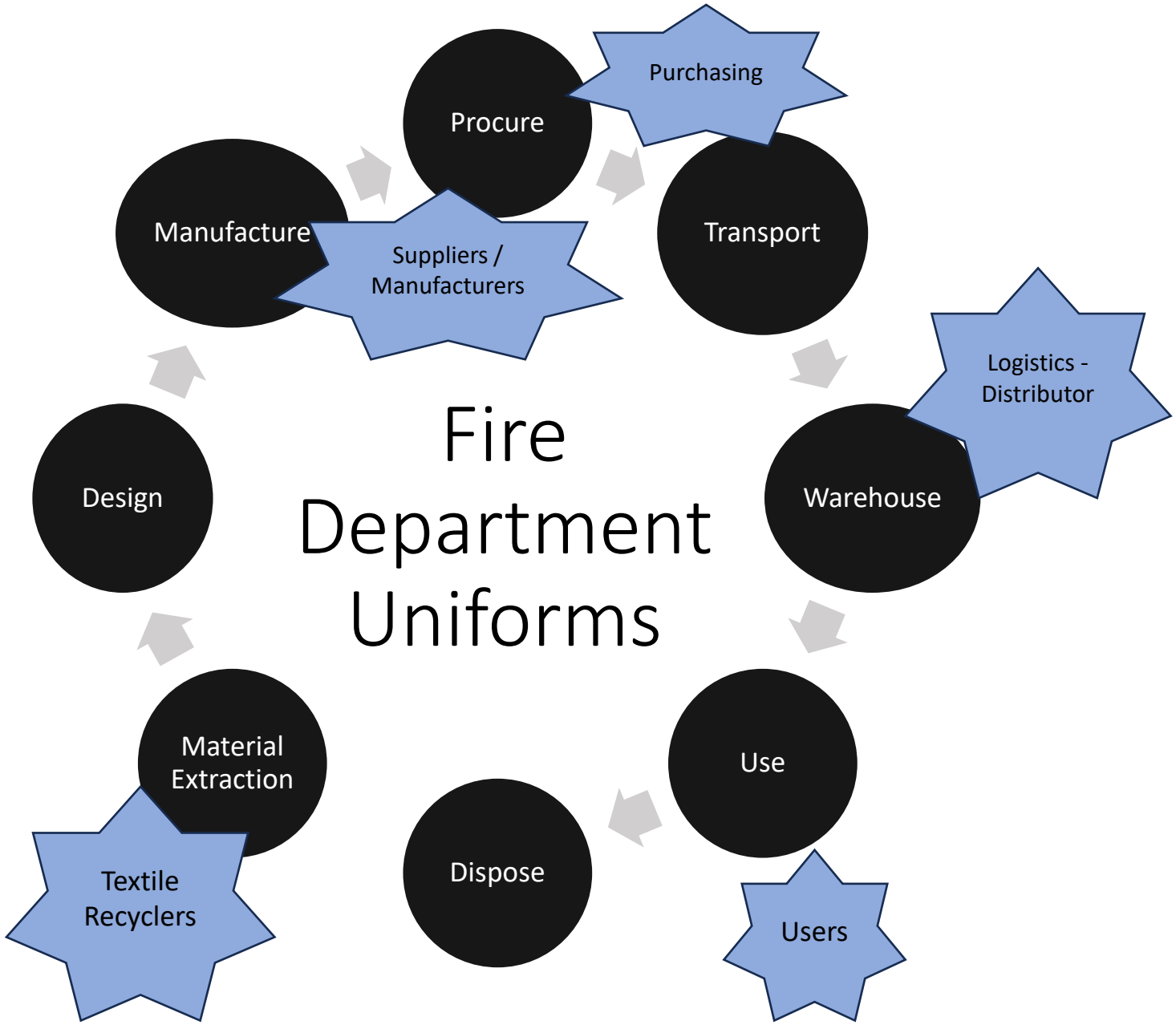
Businesses – raw material suppliers, product designers, manufacturers, retailers/distributors, consumers, waste management & recycling partners, shareholders, investors

Nonprofits – donors/funders, community members/beneficiaries, volunteers, Board members, partners – business, government or other nonprofits, advocacy groups/policymakers

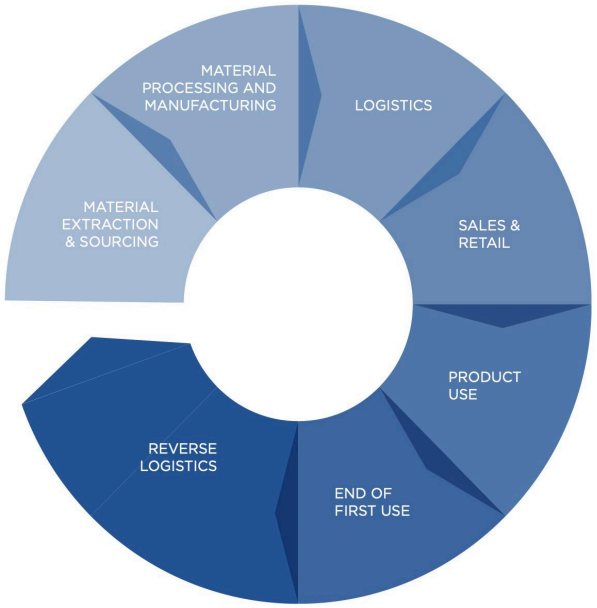
Value Chain

Key Actors

Fire Department Uniforms



Step 2: Identify Lost/Untapped Circular Value



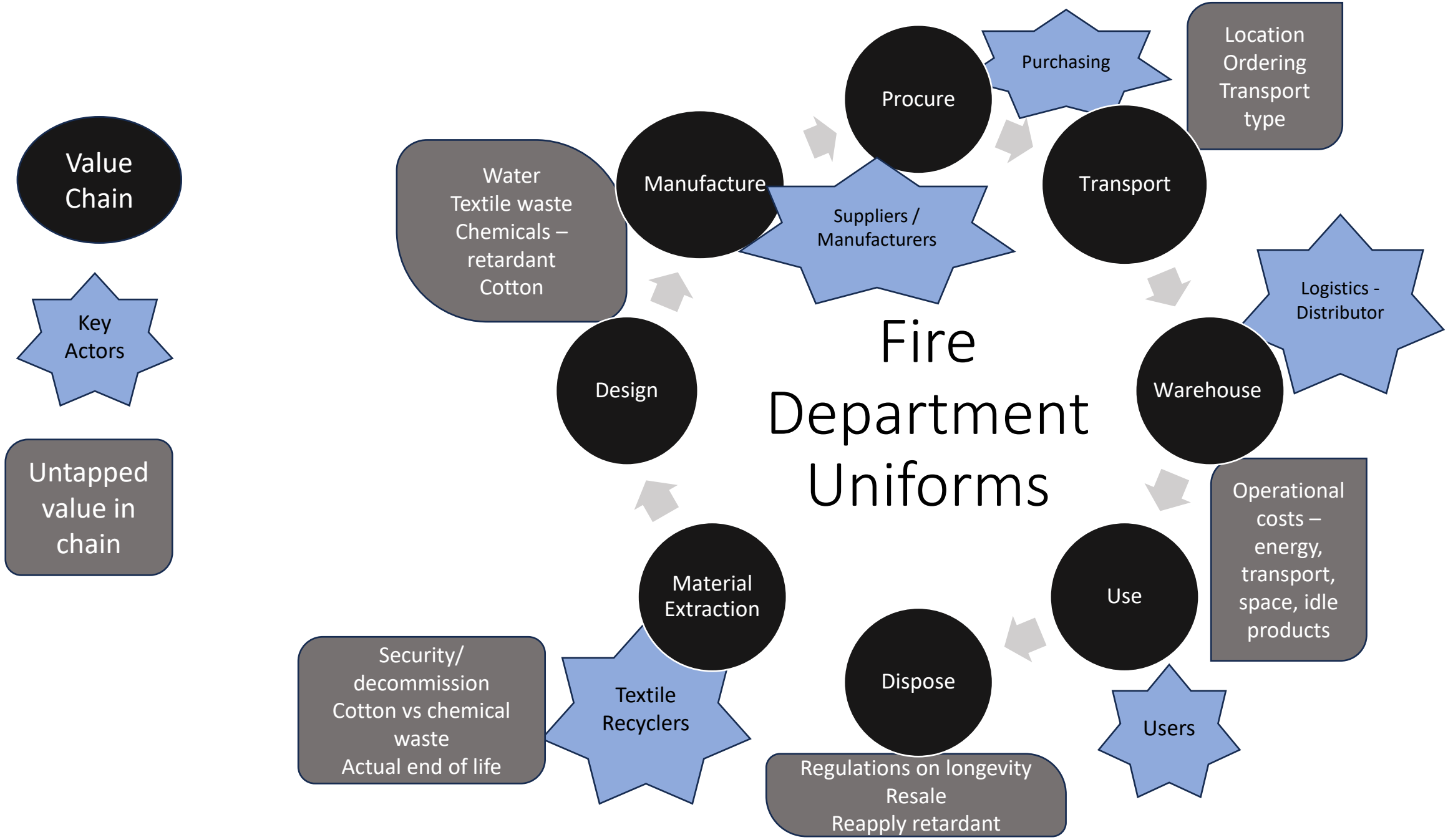
Choose a product, product line, business category that you will focus on.

Assess 4 Types of Unused Value (or Waste)

- **Wasted resources** (materials or energy used once or inefficiently)
- **Wasted lifecycles** (products with shorter than optimal working lives)
- **Wasted capacity** (idle products, equipment, space, materials sitting around, in storage)
- **Wasted embedded value** (potential worth/ utility found in materials when recovered, repurposed, or reused)

Step 2: Identify Lost & Untapped Circular Value

Wasted Resources	▪ Are there inefficiencies or waste that you could minimize or eliminate? ▪ Are you using energy in a wasteful way anywhere in your value chain? ▪ Are your using non-renewable energy which could be renewable?
Wasted Product Lifecycles	▪ Do you have products with shorter than optimal working lives? ▪ Do you have "expired" or surplus food that could still be safely eaten? ▪ Do you have buildings that are demolished while still in good condition?
Wasted Capacity	▪ Do you have excess inventory or returned goods/food? ▪ Do you have underutilized space or transportation capacity? ▪ Do you have machinery or equipment not operating at full capacity?
Wasted Embedded Value	▪ Is there potential worth or value in the materials, energy, labour or energy invested into making the products or services that aren't reused, repurposed or recycled?


Value Chain
Key Actors
Untapped value in chain
Fire Department Uniforms
Procure
Purchasing
Location
Ordering
Transport type
Transport
Logistics - Distributor
Warehouse
Operational costs – energy, transport, space, idle products
Use
Users
Dispose
Regulations on longevity
Resale
Reapply retardant
Material Extraction
Textile Recyclers
Security/ decommission
Cotton vs chemical waste
Actual end of life
Design
Manufacture
Suppliers / Manufacturers
Water
Textile waste
Chemicals – retardant
Cotton

Step 3: Identify Pain Points

What are the biggest problems you face linked to untapped circular value?

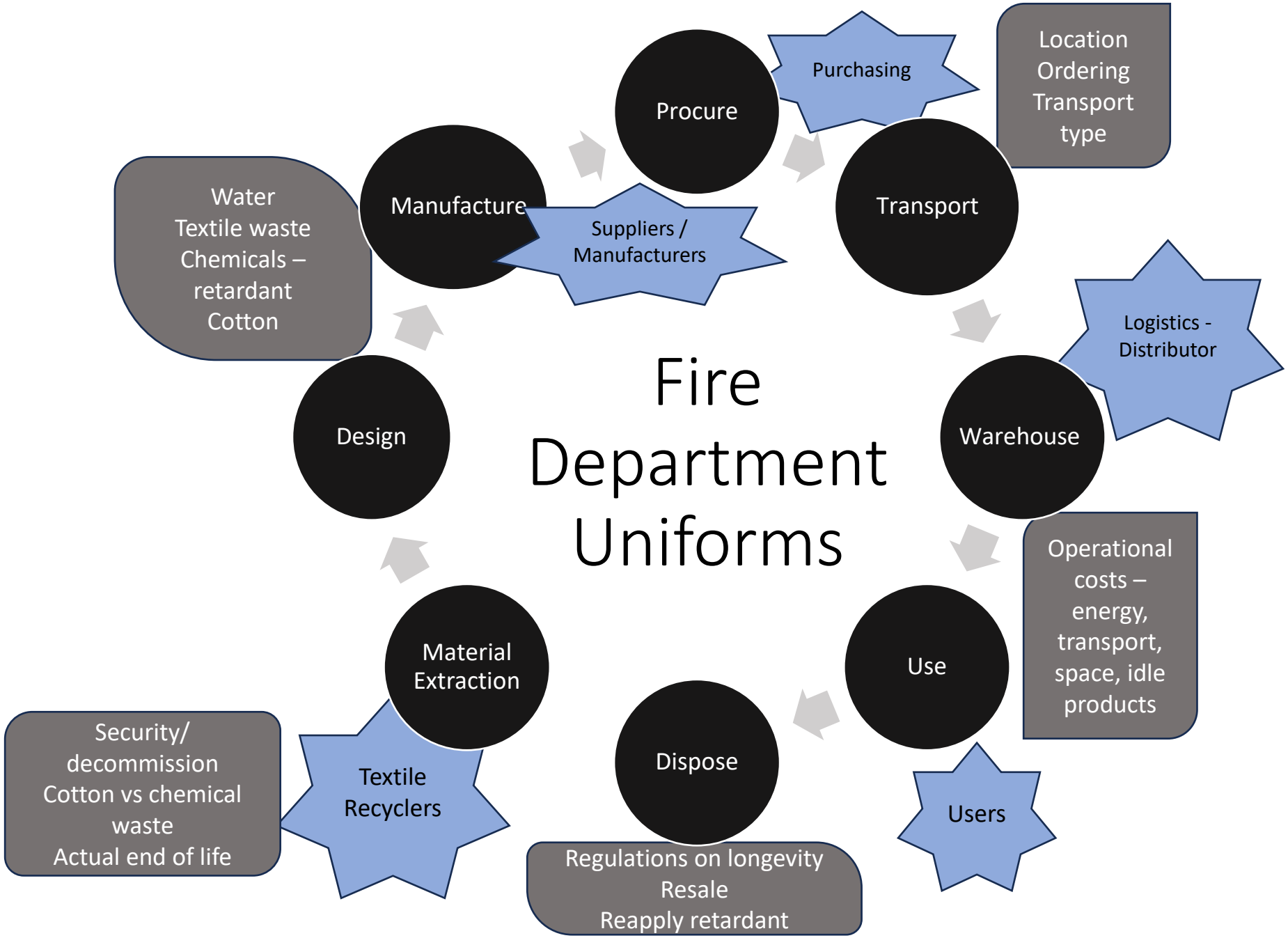
- **Costs or financial strains** – high costs for energy, materials/inputs, equipment; waste management or disposal fees; revenue losses from poor sales or competition
- **Operational challenges** – bottlenecks that slow down production or service delivery; disruptions in supply chain impact inventory levels or delivery schedules
- **Customer-related issues** – low customer satisfaction or trust; losing customers to competitors; difficulty in acquiring new customers
- **Regulatory or compliance issues** - struggling to keep up with regulations; paying extra fees or fines now; taking extra time to comply or understand emerging regulations
- **Human Resources issues** – difficulty in attracting or retaining employees, low employee morale or turnover; extra labour required for inefficiencies, disposal etc.
- **Brand Reputation Issues -** negative attention for waste/environmental impacts; seen as outdated; lower investor confidence; not advancing mission effectively
- **Environmental Impacts -** material inputs, processes and/or end of life management of products have an inherent impact on the environment

Value Chain

Key Actors

Untapped value in chain

Fire Department Uniforms



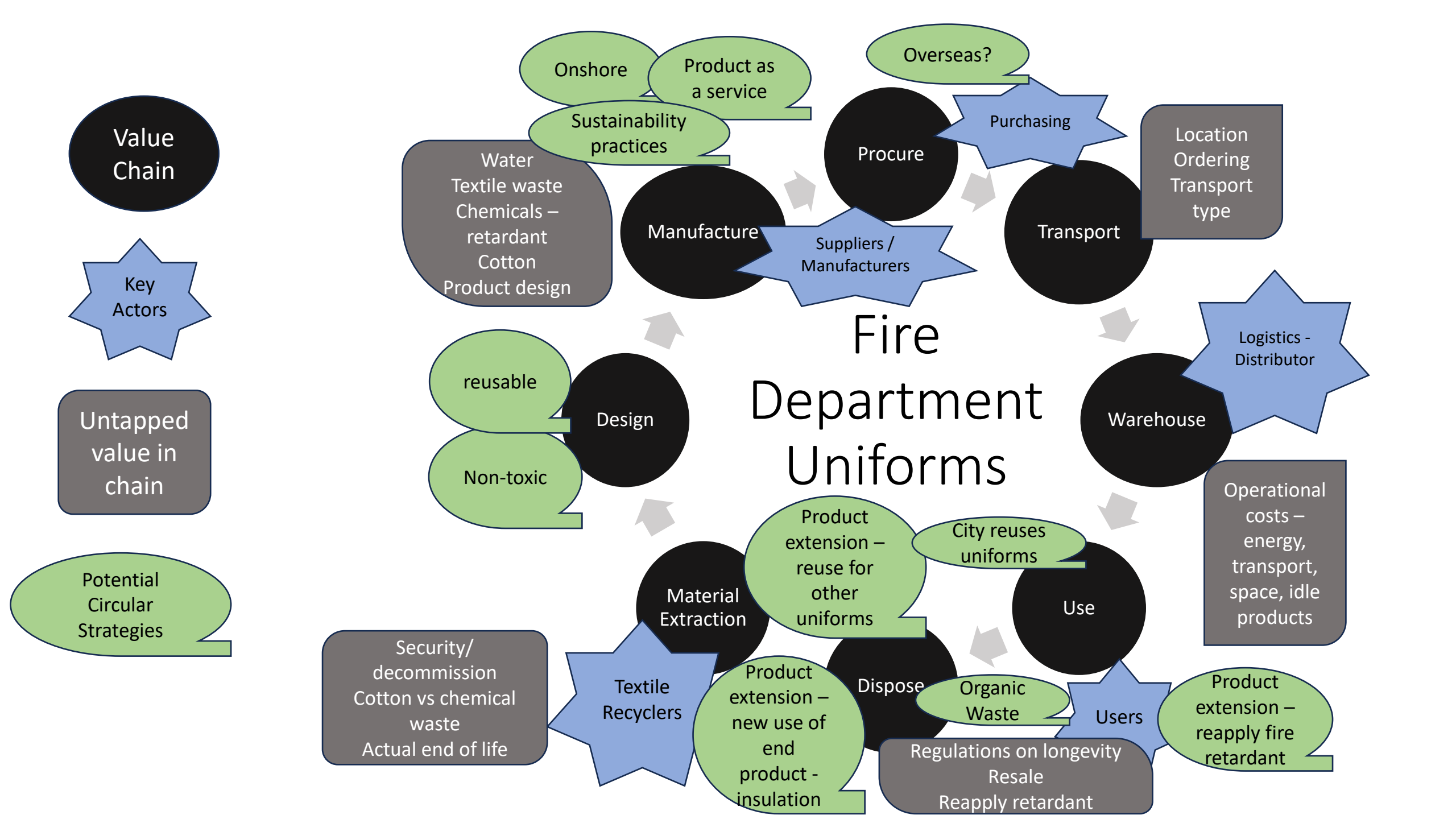
Pain Points:

- **Costs - to procure; transport store and dispose**
- **Regulations against longevity, resale, refurbishment**
- **Environmental - disposal to landfill**

Step 4: Brainstorm Potential Circular Strategies

Brainstorm potential circular strategies that align with the Narrow, Slow, Close and Regenerative Principles and help your business/organization to:

- Address lost or UNTAPPED CIRCULAR or waste?
- Resolve key PAIN POINTS that exist right now?
- Anticipate and avoid/reduce strategic LINEAR RISKS?
- Strategically amplify POSITIVE BENEFITS?


Value Chain
Key Actors
Untapped value in chain
Potential Circular Strategies
Fire Department Uniforms
Onshore
Product as a service
Sustainability practices
Water
Textile waste
Chemicals – retardant
Cotton
Product design
Manufacture
Suppliers / Manufacturers
Procure
Overseas?
Purchasing
Transport
Location
Ordering
Transport type
Warehouse
Logistics - Distributor
Operational costs – energy, transport, space, idle products
Use
City reuses uniforms
Product extension – reuse for other uniforms
Material Extraction
Design
reusable
Non-toxic
Security/ decommission
Cotton vs chemical waste
Actual end of life
Textile Recyclers
Product extension – new use of end product - insulation
Dispose
Organic Waste
Users
Product extension – reapply fire retardant
Regulations on longevity
Resale
Reapply retardant

BREAK

- 10 min
- Talk to us about the focus of value chain diagnosis for your organization
- Or if you prefer to join another group

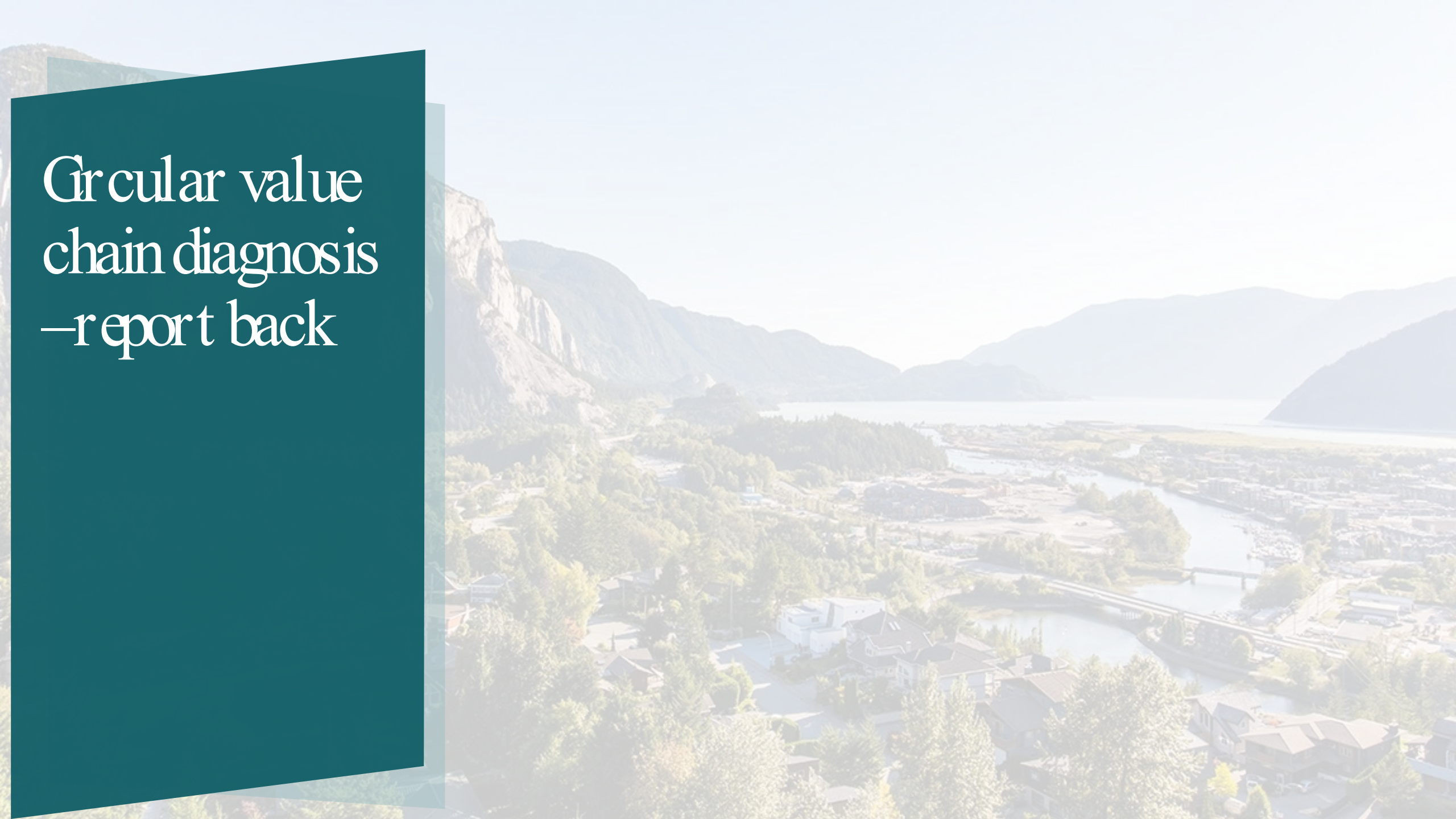
Circular Value Chain Diagnosis Exercise



Circular value chain diagnosis exercise

- Form groups for exercise - focus on your own organization or join another group
- Use the flip chart paper and pens provided
- Use the activity sheet to add notes
- Part 1
  - Draw value chain and key actors (black)
  - Map untapped circular value (grey or brown)
- REPORT BACK 1
- Part 2
  - List or map pain points (red or orange)
  - Map potential circular strategies (green)
- REPORT BACK 2

Circular value chain diagnosis – report back



Report Back Part 1

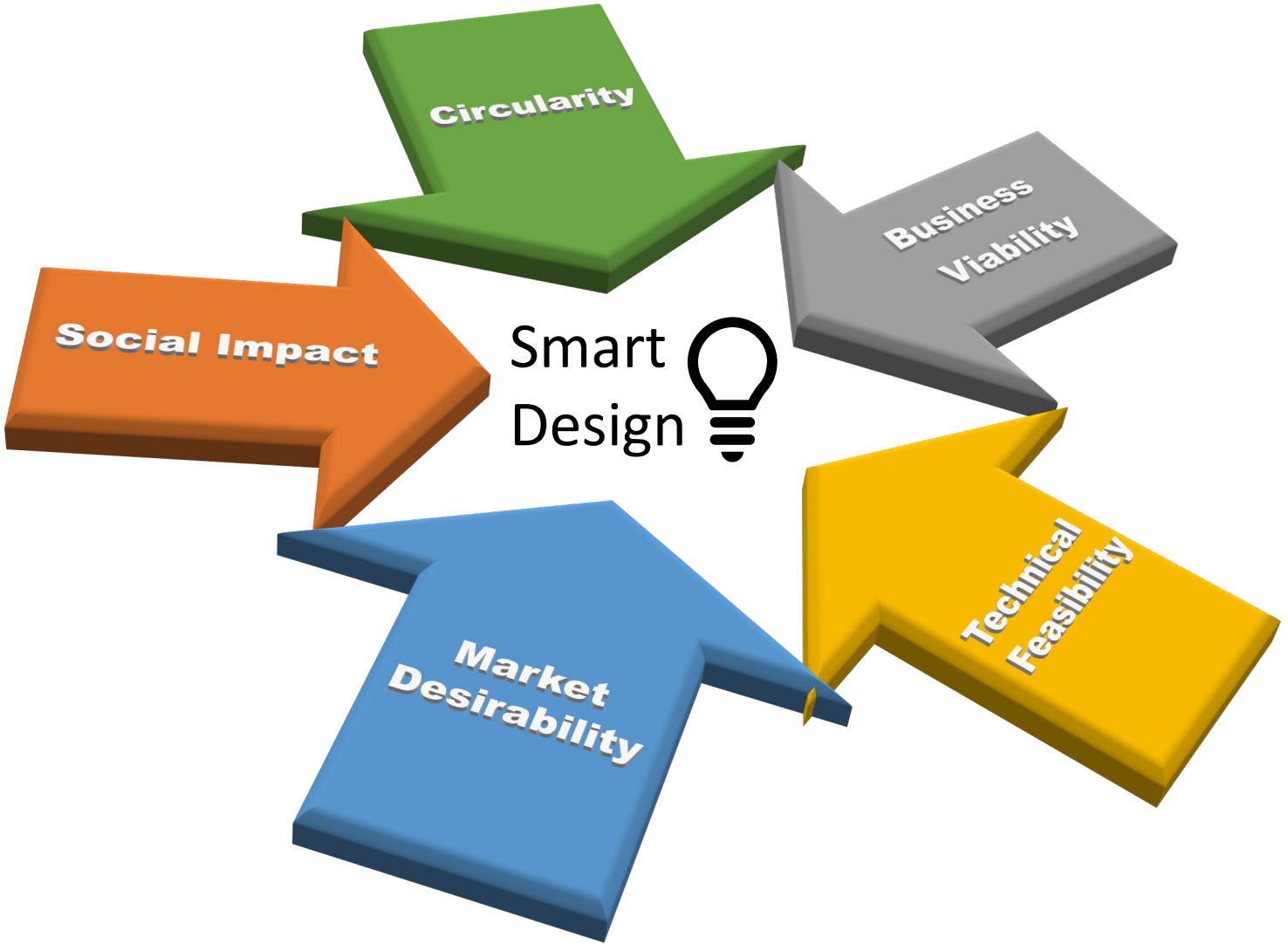
- Were you able to map the value chain and actors?
- What untapped circular value did you find?



Report Back Part 2

- What potential circular strategies are emerging for you?
- What did you learn from this exercise?

Assessment Criteria



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  - Homework: Assess opportunities with one-on-one check-ins
- **Workshop 3** ⟵
  - Develop an Implementation Plan
- **Recognition Ceremony**

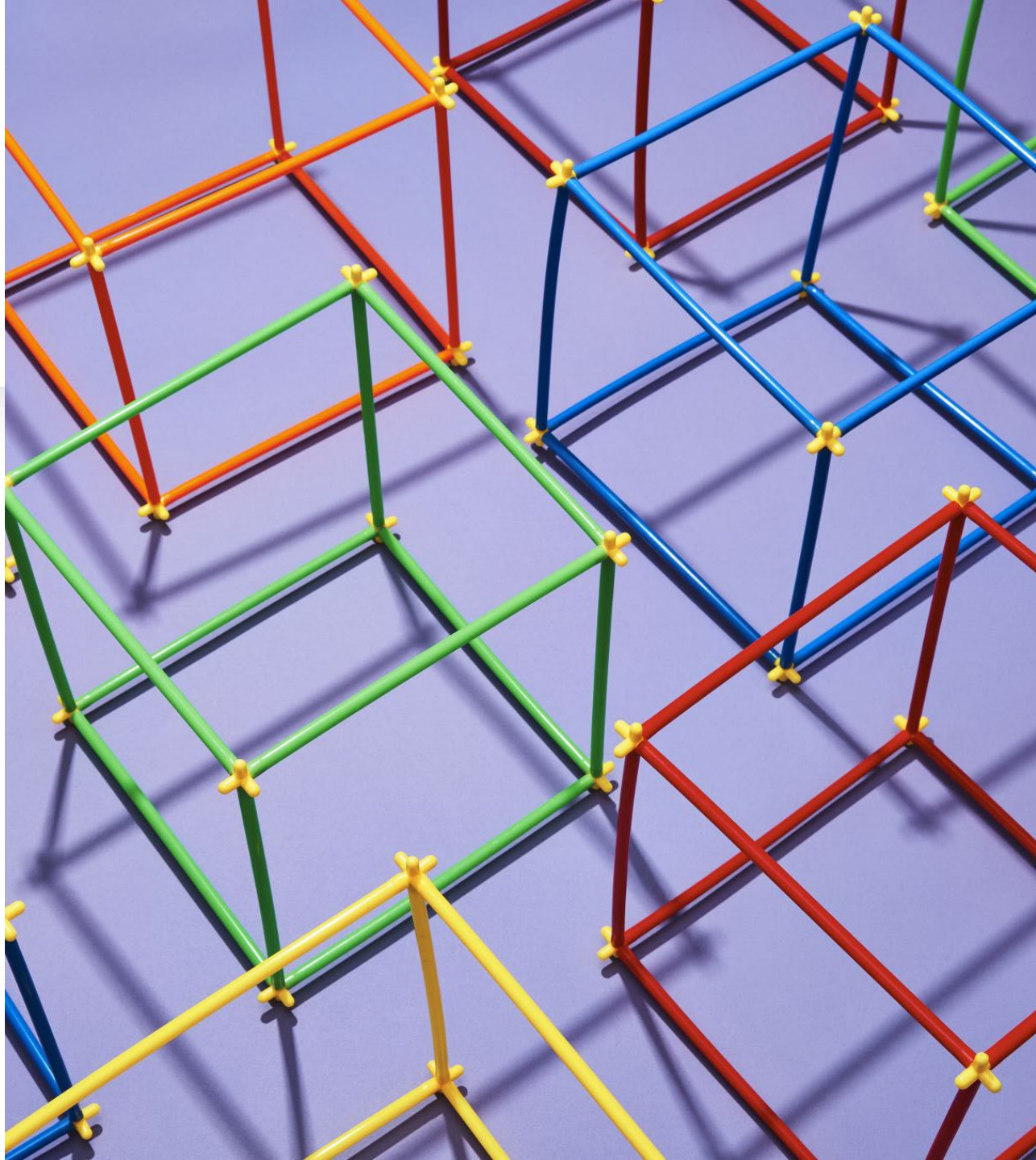
Next Steps

- Photo capture now or send worksheets to Claire (claire@ecotonestrategies.ca)
- WCS team to reach out re: one-on-one check ins and assessment process (including handout)
- Workshop feedback please!
- Workshop 3
  - Availability/timing
  - One workshop for all participants
  - Focus on implementation
- Let’s Talk Squamish
- Resources



SOARE workshops

- Maker Series: Building Your Brand - SOARE - Squamish - Jul 18, 2024 · Showpass
- Info Series: Cyber Insurance - SOARE - Squamish - Jul 11, 2024 · Showpass



Circular Trailblazer Microgrant



Grants: Maximum request of $5,000/entity (total funding of $50k)
Objective: Shift businesses and non-profits to sustainable circular operations

Example grant activities include but are not limited to:

- Waste Audits and Reduction Improvements
- Equipment Investment
- Circular Business Planning Exploration
- Staff Training on Circular Economy Opportunities
- Projects must align with circular economy principles:
- Reduce virgin material use
- Prioritize regenerative resources
- Extend product lifetimes
- Utilize waste as a resource

Application timeline: TBA

Circular Economy Innovation Challenge Program



Objective: To stimulates circular practices adoption through innovation
Focus - partnership solutions that address community issues through a circular innovation lens
Maximum request: $20,000/application (total funding of $60,000)

Projects that align with circular economy principles:

- Reduce virgin material use (narrow)
- Extend product lifetimes (slow)
- Utilize waste as a resource (close)
- Prioritize regenerative resources (regenerate)

Application timeline: TBA


Thank you
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