SUBMISSION FORM
NATIONAL ZERO WASTE COUNCIL DESIGN PORTFOLIO

zeroWASTE
NATIONAL ZERO WASTE COUNCIL

Celebrating Canadian Design for Waste Prevention and Systems-Thinking

Company name:		**Location:**
Product/Packaging Name:		**Available since (year):**
One sentence description of use:		
Contact Name:	**Email:**	**Phone:**
Website:		

1. Are you submitting a product, packaging, or product & packaging blend?

☐ Product ☐ Packaging ☐ Product & packaging blend

Definition: A package contains a product.
e.g. A bottle of barbecue sauce: BBQ sauce is product, bottle is packaging
A Ziploc bag is both a product & package, thus a blend

2. Which stages of creation occur in Canada?

☐ Invented in Canada ☐ Design in Canada ☐ Manufactured in Canada
☐ Packaged in Canada ☐ Sold in Canada ☐ Assembled in Canada

Please **send us a photo** that you would like featured on the portfolio. Maximum size 600 kb.

Pre-Use

Pre-use includes production, distribution, and sale; everything from the cradle – raw material extraction – to the factory gate, and onwards to the customer's door.

Principle: Use no ethically objectionable material

3. How do you ensure an ethical supply chain?

☐ Accredited 3rd party certifications ☐ Trusted manufacturing partnerships
☐ Other, please explain:

List all documentation the submission has that verify an ethical and sustainable chain of custody for source materials:

Principle: Prioritize re-used, reclaimed, recycled, or renewable source materials.

4. The materials used to manufacture this submission are:

☐ Re-used ☐ Reclaimed ☐ Recycled ☐ Virgin

_____ % _____ % _____ % _____ %

5. What are the primary materials used to make this product/package? ☐ Unknown

6. *If no virgin materials are used, skip to question 9.*
The virgin materials used are:

☐ Renewable ☐ Non-renewable

____ % ____ %

7. If renewable, how long do the renewable materials take to regrow?

☐ 1 year ☐ 2-9 years ☐ 10-20 years ☐ Other: ☐ Do not know ☐ Does not apply

8. Are the renewable materials certified sustainable?

☐ Yes ☐ No ☐ Does not apply

If yes, which certifications?

Principle: Minimize energy used during manufacturing and prioritize renewable sources of energy.

9. Has a formal Life Cycle Analysis (LCA) been conducted for this product?

☐ Yes ☐ No

Provide link if available:

10. Is the energy used for manufacturing:

☐ Renewable (hydro-electric, wind, solar) ☐ Non-renewable (coal, gas, nuclear) ☐ Do not know

Is energy use reduced or minimized during manufacturing?

☐ Yes ☐ No ☐ Do not know

If yes, how?

11. Are low-waste extraction techniques prioritized for source materials?
☐ Yes ☐ No ☐ Do not know
If yes, how? ☐ Do not know

Principle: Prioritize low waste manufacturing techniques.

12. What byproducts are created during the stages of manufacturing?
☐ Do not know

13. How is disposal of manufacturing byproducts managed?
☐ With a management plan ☐ No management plan ☐ Do not know
If a management plan is in place, please describe:

14. How is waste prevented or reduced during manufacturing?
☐ Re-use of byproducts and materials internally
☐ Add value to manufacturing byproducts by selling or giving them to another industry
☐ Technique of manufacture is designed to minimize and prevent waste. If so, please explain:

☐ None of the above
☐ Other, please explain:

15. Describe the overall manufacturing techniques:

☐ Additive (starts without material then adds to make the product, e.g. thermo-filling, 3D printing)

☐ Subtractive (starts with a set amount of materials, then takes away to make the product; includes cascading subtractive techniques)

Brief explanation:

Principle: Dematerialization reduces the total amount of material used during manufacture, and also reduces the amount discarded.

16. What percent of the incoming materials are converted into the final product/package?
☐ 10-50% ☐ 50-70% ☐ 70-100% ☐ Other: ☐ Do not know

Describe any measures taken to increase the conversion rate:

17. Has the quantity of material used been reduced from previous versions of this product or package?
☐ Yes. If yes, by what percent? ☐ No ☐ No previous versions

Principle: Maximize product density and minimize packaging required. This means providing enough packaging to protect the product and inform and appeal to the consumer, without excess.

18. What types of packaging are required for your product?
☐ Primary – in contact with the product.
☐ Secondary – additional to primary, to display the product. Typically discarded before use.
☐ Tertiary – packaging removed before retail, including what is used for transport.

19. Is the amount of packaging required minimized?
☐ Yes ☐ No ☐ Do not know

Please explain:

20. What methods are used to optimize product density and packaging efficiency?
Check all that apply.
☐ Using reusable packaging
☐ Using recyclable packaging
☐ Removing packaging that serves *only* aesthetic purposes
☐ Minimizing weight of product and package
☐ Maximizing the number of products/pallet and products/shipment
☐ Eliminating air space in packaging
☐ Other:

Principle: Plan for efficient transportation.

21. What are the primary modes of transport used to produce, distribute, and sell the product/package?
☐ Ship/ocean freight ☐ Train ☐ Road ☐ Air ☐ Other:_____

Is transportation efficiency optimized during production and sale? How?

22. If there are other methods used to reduce or prevent waste pre-use, i.e. during production and sale, please describe them here.

Use

Principle: A product which clearly meets a need is less likely to be disposed of prematurely. Additionally, clear instructions for use and disposal reduce the chance of breakage, under-use, early disposal, or deposit in the wrong waste stream.

23. What need does this product or packaging meet?

24. How are instructions for use presented to the consumer?
☐ Enclosed operations manual
☐ Instructions on secondary packaging (the external box removed for use)
☐ Instructions on primary packaging (container required for use)
☐ Directions use both text and diagrams
☐ Other, please explain:

25. What customer support is provided for this product?
☐ Web FAQ ☐ Email ☐ Online chat ☐ Phone ☐ Mail-in
☐ Other:

26 How are disposal directions presented to the customer? See question 24 for suggestions.

Principle: Design for low energy consumption during use.

27. Is energy used directly to operate the product or packaging, is the product part of a system that uses energy, or both?

☐ Energy used to operate product (e.g. hairdryer)

☐ Energy used to operate a system necessary for product function (e.g. laundry detergent)

☐ Requires no energy for use. If so, skip to Question 30.

28. If energy is used to operate, does the design minimize energy use?
(e.g. designed for efficient batteries, automatic timed shut down, no 'standby' energy use)

☐ Yes ☐ No ☐ Does not apply

If yes, how?

29. Has the energy used been reduced from previous versions? ☐ Yes ☐ No ☐ Do not know ☐ Does not apply

If yes, by how much?

Principle: Extend the products useful life through repair and return programs; and, eliminate the need for other products in the consumer's life through repurposing or integrating multiple functions.

30. How is the useful life of this product or packaging extended? Check all that apply.

- ☐ Design for easy repair (e.g. standardization of parts, non-destructive releases)
- ☐ Upgrading of parts is prioritized over full-product replacement
- ☐ Flexibility to upgrade software
- ☐ Rental program; product is returned to the company after use
- ☐ Repair program
- ☐ At-home repair kits, instructions, or customer support
- ☐ Sale of replacement parts (ideally for current and previous versions)
- ☐ Sale of refurbished products
- ☐ Robust storage container protects product to extend useful life
- ☐ Receive used parts for recycling within the manufacturing process
- ☐ Other:

31. Does this product/package reduce consumption by replacing functions of other products? How?
(e.g.: a cell phone's multiple functions replace the need for a calculator & camera,
or; packaging functions as a hook to hang the product once removed,
or; a jar can be repurposed for food storage)

32. Describe any other methods used to prevent and reduce waste during use of the product/package:

Post Use

Principle: Divert materials from landfill and promote a circular economy using methods such as repair, easy disassembly and design for re-use, use by another industry, composting and recycling.

33. Which of the following apply to this submission?

☐ Easy to disassemble ☐ Designed for reuse ☐ Designed to re-fill ☐ Durable
☐ Disposable

34. If disposable, how does this product/package reduce waste compared to similar disposable products?

35. Which disposal stream is the submission intended for?

☐ A. Readily recyclable (most municipalities) *Percent by weight?* ____%
☐ B. Selectively recyclable (some municipalities) *Percent by weight?* ____%
☐ C. Commercially compostable *Percent by weight?* ____%
☐ D. Home compostable *Percent by weight?* ____%
☐ E. Other, please explain:

36. Does the company collaborate with waste handlers in your market areas (municipalities, commercial haulers, recyclers, composters) to ensure proper disposal?

☐ Yes ☐ No

If yes, how?
(e.g. acceptance testing in single- and multi-stream recycling facilities)

37. Which methods are used to maximize disposal to the correct stream?

☐ Labeling of similarly composed materials for easy isolation
☐ Compatible material selection for recycling
☐ Demountable material surfaces
☐ Easy separation of dissimilar materials
☐ Encouraging return of repurposable materials
☐ None of the above
☐ Other, please describe:

38. Does the company collaborate with any other industries to take this product/package, or its constituent materials, after use?

☐ Yes ☐ No

If yes, how?

Principle: Make accurate environmental claims support and promote sustainable design methods.

39. Does the company make environmental claims about this product/package?

☐ Yes ☐ No

40. If yes, what claims are made? Provide supporting links if available.

You're Done!