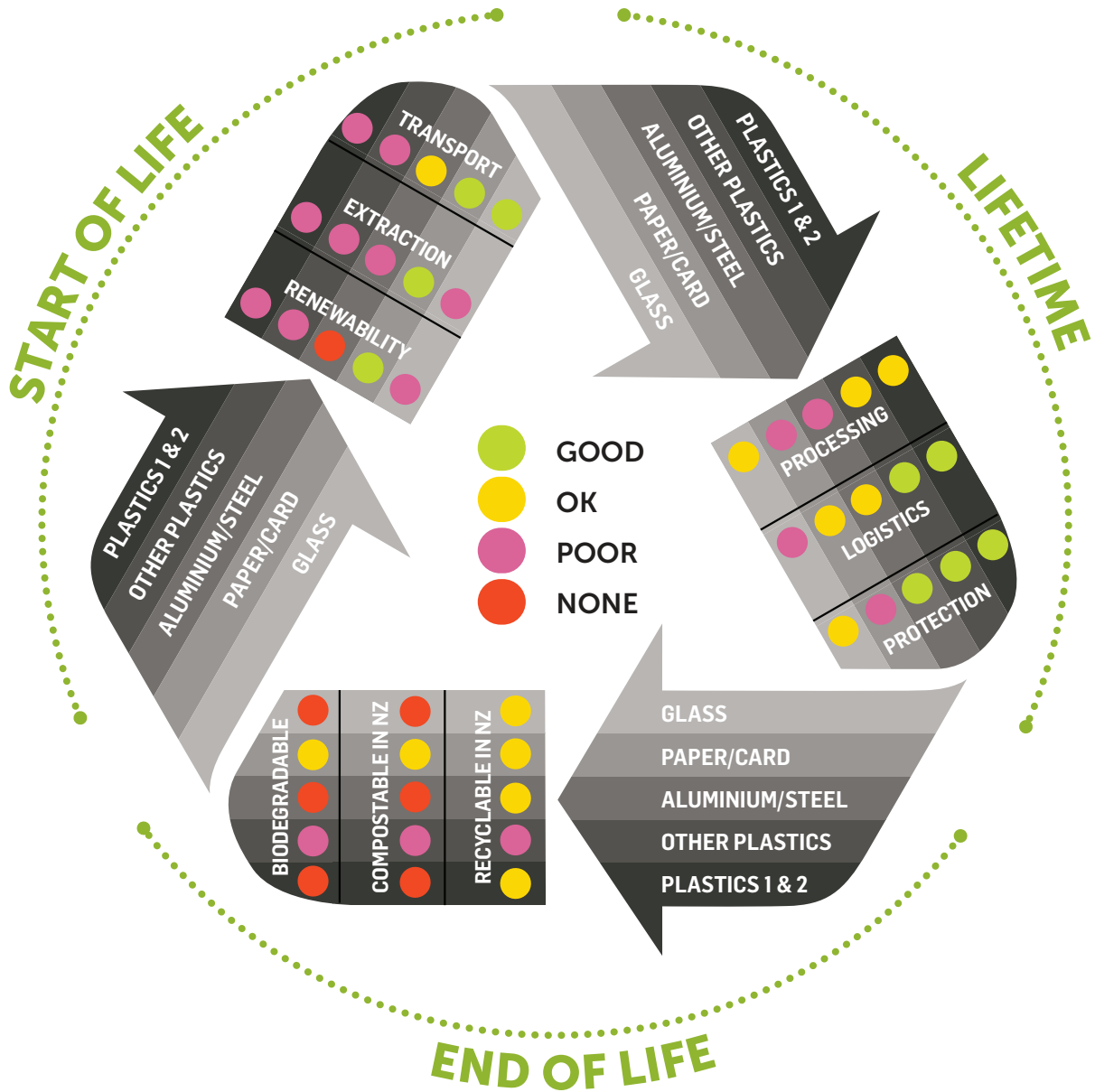


# CallaghanInnovation

New Zealand's Innovation Agency

## THE SUSTAINABILITY OF PACKAGING IN NZ



## Relevant factors businesses should consider

### START OF LIFE

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**Plastics 1&2** – Less than 1% renewable; fracking and drilling harms the environment; all packaging plastics shipped in.

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**Other plastics** – Less than 1% renewable; fracking and drilling harms the environment; all packaging plastics shipped in.

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**Aluminium/steel** – Non-renewable source; open pit mining harms the environment; aluminium sourced offshore but iron sands mined onshore.

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**Paper/card** – NZ forests renewable; fossil fuel used for harvesting but can be mitigated; wood locally sourced, but some pulp and paperboard shipped in.

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**Glass** – Sand very slow to renew; open pit mining and sea bed dredging harms the environment; sand, dolomite and limestone mined onshore.

### LIFETIME

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**Plastics 1&2** – Medium energy use and pollution to make and shape; lightweight and can be tightly packed; good for perishables and robust.

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**Other plastics** – Medium energy use and pollution to make and shape; lightweight and can be tightly packed; good for perishables and robust.

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**Aluminium/steel** – Medium-to-high energy use and pollution to make and shape; not too heavy and ok for packing density; good for perishables and robust.

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**Paper/card** – High water and medium energy use to make and shape; lightweight and ok for packing density; poor for perishables and prone to damage.

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**Glass** – High energy use to make and shape; heavy but ok for packing density; good for perishables but prone to catastrophic damage.

### END OF LIFE

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**Plastics 1&2** – Local recycling but some sent offshore; not compostable; not biodegradable.

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**Other plastics** – Mostly sent offshore for recycling; low percentage compostable in NZ; low percentage biodegradable.

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**Aluminium/steel** – Mostly sent offshore for recycling; not compostable; not biodegradable but will eventually rust.

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**Paper/card** – Local recycling but some sent offshore; poor compostability in NZ; will biodegrade easily only if uncoated.

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**Glass** – Recycled in Auckland and some downcycled; not compostable; not biodegradable but will eventually wear down to sand.

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