

WASTE BURNING CERTIFIED?

Zero Waste Certification Scorecard

	ZERO WASTE OR ZERO WASTE TO LANDFILL (50%)	EMPHASIS ON LESS CONSUMPTION (30%)	SOCIAL/ ENVIRONMENTAL JUSTICE (20%)	WEIGHTED AVERAGE
				
				
				
				
				
				
				
				

 Way to go!
  Getting close
  Needs immediate attention
  Unacceptable

ZW or ZW to landfill Does the standard count incineration as diversion? Weight: 50%		Emphasis on Less Consumption Does the standard prioritize upstream measures for waste prevention? Weight: 30%		Social/Environmental Justice Does the standard address social aspects? Weight: 20%	
Incineration/WTE is counted as diversion	0	There are no requirements on less consumption	0	There are/few requirements on social/environmental justice considering protection of workers	1
Incineration/WTE is counted as diversion under certain circumstances	1	There are few requirements on less consumption	1		
Incineration/WTE is counted as diversion with strict restrictions (e.g. 10% cap)	2	There are requirements on less consumption with detailed measures and guidelines	2	There are requirements on social/environmental justice including protection of workers and overburdened communities, human rights of stakeholders involved	2
Incineration/WTE is not counted as diversion	3	Most requirements focus on upstream approaches, with detailed measures and guidelines	3	Social/environmental justice criteria are highlighted as one of key aspects of the standard	3

Purpose of the Zero Waste Certification Scorecard

This Scorecard is designed:

- To shed light on how some certification programs can contribute to false legitimization of “zero waste to landfill” or waste burning labelled or conflated in other ways as a form of waste minimization
- To highlight why incineration, also known as Waste-to-Energy, should not be counted towards zero waste goals
- To encourage certifying entities to play a pivotal role in influencing sustainable business practices, raising expectations on waste reduction and social/environmental justice and guiding businesses away from incineration

Note: The scorecard is not intended to cover the full scope of all existing programs or provide a technical analysis for the market. The analysis was conducted based on three specific criteria that recognize important zero waste principles: no incineration, emphasis on source reduction, and social/environmental justice.

ZERO WASTE OR NOT?

ZERO WASTE



No burn, no bury, no toxics



Sustainably & effectively recovers resources through waste prevention, reuse, recycling, composting



Tackles a throw-away culture and promotes systems change

WASTE-TO-ENERGY



Harms communities by processing waste in incinerators, cement kilns & other industrial boilers



polluting, wasteful and cost-prohibitive



Provides end-of-pipe solutions that perpetuate excessive production and consumption

Zero Waste vs “Zero Waste to Landfill?”

Despite its similar look to zero waste, the term “Zero Waste to Landfill” misrepresents the concept of zero waste by incentivizing and legitimizing incineration/WTE. Burning waste pollutes our air, water and land, threatening human health and significantly contributing to climate change. Rather than an alternative to landfilling, incineration is an additional step before landfilling ash and other wastes from burning. It also fuels an unsustainable system of overconsumption and wasting, and burdens communities of color and low-income communities with toxicity, odors, and noise. The concept of zero waste becomes clearer when we rule out what is NOT zero waste: **“no burn, no bury, no toxics.”**

According to an internationally peer-reviewed definition, zero waste is the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning, and with no discharges to land, water, or air that threaten the environment or human health. For more, please visit Zero Waste International Alliance’s website (zwia.org).

Scoring methods

Each certification standard is evaluated based on three categories, on a scale of 0 to 3. These categories are weighed differently according to the importance we believe should be put in any standard addressing zero waste. The category on incineration represents the largest portion among three by 50%, followed by less consumption (30%) and social/environmental justice (20%). We limited the scope of scorecard to these three elements to effectively highlight our principles intentionally excluding other criteria such as types of entities covered, materials being handled (hazardous, e-waste), reporting processes and the level of scrutiny and market availability.



CATEGORY 1: Does the standard count incineration as diversion? Incineration, also known as “waste-to-energy” is the most expensive, polluting, and inefficient way of waste disposal that burdens the environment and communities with high toxicity. No incineration should be promoted nor justified as a diverting method for “zero waste.” While each program requires different level of diversion, allowing exceptional incineration or landfilling at varying rates up to 10%, we only focused on whether the criteria were designed to count incineration as diversion, rather than the actual percentage of incineration allowed for certification



CATEGORY 2: Does the standard prioritize upstream measures for waste prevention? The category on less consumption puts an emphasis on upstream approaches including rethinking current consumption patterns, redesigning manufacturing processes, prioritizing more sustainable options when purchasing, etc. Businesses can effectively minimize waste generation by shifting manufacturing/operation toward a closed-loop system. Certifying entities have a tremendous role to play in guiding businesses toward this direction.



CATEGORY 3: Does the standard address social aspects? Waste disposal has safety and health implications for nearby communities and beyond as well as employees and other stakeholders involved. It is no secret that incinerators and landfills are disproportionately located in communities of color and low-income communities, and in that respect, social and environmental justice are related to category 1 in this scorecard. Category 3 covers additional issues such as workers safety, protection of stakeholders in supply chains, exportation of toxic materials, promotion of human rights and democratic participation. We hope that consideration of social/environmental justice will be mainstreamed in the certifying industry as evaluation methodologies advance.

Standard	ZW or ZW to Landfill	Emphasis on Less Consumption	Social/Environmental Justice	Weighted Average	Final Score
	Weight: 50%	Weight: 30%	Weight: 20%		
TRUE	3 Incineration is not counted as diversion	3 Upstream management, redesign, reduce, reuse take up 42/81 points in the criteria	2 It includes requirements on employee safety, protection of stakeholders in supply chain and supporting local economies	2.8	3
ZWIA (Business Recognition Program)	3 Incineration is not counted as diversion	3 Intended to focus first on reducing and reusing materials and then recycling and composting according to waste management hierarchy	1 The entity must endorse Zero Waste Business Principles, which have social justice elements	2.6	3
Zero Waste Canada	3 Incineration is not counted as diversion	3 It puts Zero Waste Hierarchy at the core, which emphasizes rethink, reduce reuse with detailed roadmaps	1 A larger societal perspective is considered in the criteria to encourage businesses to pursue ZW principles through wider community engagement and advocate for a systemic change	2.6	3
Cradle to Cradle	1 Biomass incineration is counted as diversion, only if the assessor determines that incineration of the material does not lead to problematic by-products	3 Exclusively focused on product design and material input	3 One of 5 categories, Social Fairness, requires a streamlined self-audit on fundamental human rights, labor standards, social responsibility program, etc	2	2
Underwriters Laboratories Inc. (UL) 2799A	2 It requires 90% or more waste diversion without WTE for any Zero Waste to Landfill claim WTE may be counted as diversion when its life cycle net carbon, energy and environmental benefits are examined	2 It includes redesigning to eliminate or reduce waste and reuse in the criteria	1 No requirements on social/environmental justice	1.8	2
Green Circle Certified	0 Incineration with energy recovery is counted as diversion. It only allows incineration for non-recyclables, although questions on the definition of non-recyclables remain	2 Source reduction and reuse in same process and different process, redesign, materials returned to supplier included in the methods of diversion	1 No requirements on social/environmental justice	0.8	1
Carbon Trust	0 Incineration with energy recovery is counted as diversion	1 It endorses the Waste Hierarchy provided by the EU Waste Directive and mentions waste reduction	1 No requirements on social/environmental justice	0.5	1
NSF	0 "Waste-to-energy may be counted towards diversion up to 50%, but only after opportunities for reduction, reuse, recycling have been explored"	? unknown	? unknown	?	?

WHY DOES IT MATTER?

Case 1: “Zero Waste to Landfill” Legitimizes Incinerators

Widespread misconception of “Zero Waste to Landfill” can open a window of opportunities for waste burning facilities to promote their own operations. Covanta, one of the largest companies in the waste incineration/WTE industry worldwide, actively uses the term “zero waste to landfill” in promotional publications. In [its white paper on “zero waste to landfill,”](#) Covanta presents different ways to define zero waste that consider waste-to-energy as a way of material recovery, citing certifying entities that count incineration (Waste-to-Energy) as diversion, including Green Circle Certified, The Carbon Trust, Underwriters Laboratory (UL), and NSF International. The company offers [consulting services for “Zero Waste to Landfill”](#) for their clients, which include providing documentation and process proof to businesses that are seeking for third-party “Zero Waste to Landfill” certification.



Case 2: False Zero Waste Standards Give Businesses the Means for Greenwashing

Many corporations, especially large-scale transnational ones set their own evaluation system to credit themselves as a zero waste to landfill company. In September 2016, consumer giant [Unilever claimed to have achieved a zero-waste-to-landfill target](#) across its global factory network of 600 factories in 70 countries using the four Rs approach: reduce, reuse, recycle and recover. What’s alarming is that Unilever [sends non-recyclables to cement kilns](#) for energy recovery in partnership with a global cement manufacturer LafargeHolcim. Waste burning in cement kilns, referred as ‘co-incineration,’ is known for toxin release and greenhouse gas emissions, posing risks to neighboring communities. Recognition of “zero waste to landfill” leaves room for such greenwashing and invites more businesses to simply burn waste instead of striving for redesigning the cycle of resource extraction, consumption and circulation. Certifying entities must exercise their leveraging power for sustainable resource management by encouraging businesses to aim for true Zero Waste.

The following tables contain the detail of certification programs covered in the scorecard (in alphabetical order). Most of the descriptions are directly quoted from the official document with minimum interpretation of the facts. You can download the full text of the standards by clicking the title of each program.

Carbon Trust - Corporate Waste Protocol

Year	Certification levels	Promotes Zero waste distinct from Zero waste to landfill		Eligibility/Scope of Application	Requirements	Emphasis on Less Consumption
2016	Certifies "Zero Waste to Landfill"	Covers Zero Waste to Landfill only Other programs cover sustainable manufacturing The standard takes a holistic approach with a set of other standards, which cover energy use and greenhouse gas emissions, water use and waste output.		Covers companies and manufacturing facilities	At least 99% of generated waste is diverted from landfill through recycling, composting, reusing and energy recovery.	Upstream impacts are included in the waste management assessment criteria (5/100) Organizations seeking certification must demonstrate a reduction in waste arisings that is greater than a pre-set target
Incineration	Waste-to-Energy	Gasification /Pyrolysis	Co-incineration (cement kilns)	Highest and Best Use	Social/Environmental Justice	Note
Not counted as diversion. Incineration without energy recovery is ranked the same as landfill, at the bottom of the hierarchy.	Incineration for energy recovery is considered as diversion based on the European waste hierarchy, where energy recovery is considered superior to landfill. Carbon Trust sees energy recovery as "an appropriate waste management approach for some wastes in a well-regulated jurisdiction."	Not specified	Not Specified	Endorses and applies the Waste Hierarchy provided by the EU Waste Directive for implementation criteria	N/A	Sign-up required for PDF booklet download

Cradle to Cradle

Year	Certification levels	Promotes Zero waste distinct from Zero waste to landfill	Eligibility/Scope of Application	Requirements	Emphasis on Less Consumption	
Initial release in November 2012 Latest version released in January 2016	5 levels Basic, Bronze, Silver, Gold, Platinum	It aims to eliminate the concept of waste	This certification program applies to materials, sub-assemblies, and finished products.	5 Categories: Material health Material reutilization Renewable energy and carbon management Water stewardship Social fairness 3 principles: Eliminate the concept of waste Use renewable energy Celebrate diversity	Exclusively focuses on product design and material input	
Incineration	Waste-to-Energy	Gasification /Pyrolysis	Co-incineration (cement kilns)	Highest and Best Use	Social/Environmental Justice	Note
N/A	"Renewably sourced materials that are incinerated to produce energy ('waste to energy') may be counted as recyclable or compostable if the assessor determines that incineration of the material does not lead to problematic by-products (i.e., scrubber technology has been demonstrated to efficiently remove the problematic by-products)."	Includes "chemical transformation (e.g. plastic depolymerization, pyrolysis, gasification)" as a way of recovering materials	Not mentioned	One of 5 categories, Social Fairness, requires a streamlined self-audit on fundamental human rights to ensure that the business operation protects the value chain and all stakeholder interests, including employees, customers, community members, and the environment Covered themes: Child labor, Forced labor, Excessive work time, Provision of a living wage, Worker health and safety, Wage Assessment, Accidents and death in workplace, Toxicity or chemical exposure in workplace	"Cradle to Cradle is a beneficial design approach integrating multiple attributes: safe materials, continuous reclamation and re-use of materials, clean water, renewable energy, and social fairness."	

Green Circle Certified - Waste Diversion from Landfill

Year	Certification levels		Promotes Zero waste distinct from Zero waste to landfill	Eligibility/Scope of Application	Requirements	Emphasis on Less Consumption
Not specified	Certifies zero waste or a diversion rate		This standard covers Zero Waste to Landfill only Other programs cover sustainable manufacturing	Covers companies and manufacturing facilities	Acceptable means of diversion: source reduction, recycling, materials returned to supplier, reuse in same process, reuse in different process, redesign to eliminate waste processing and selling to third party composting, anaerobic digestion with energy recovery, waste-to-energy (non-recyclable/ not economically recoverable)	Source reduction and reuse in same process and different process, redesign, materials returned to supplier included in the methods of diversion
Incineration	Waste-to-Energy	Gasification /Pyrolysis	Co-incineration (cement kilns)	Highest and Best Use	Social/Environmental Justice	Note
Accepts "the conversion of non-recyclable/ not economically recoverable materials into heat, electricity, or fuel through a variety of processes, including combustion, gasification, pyrolyzation, anaerobic digestion, and landfill gas recovery (LFG)"			Not specified	Not specified	N/A	

NSF International - Waste Diversion from Landfill*

Year	Certification levels	Promotes Zero waste distinct from Zero waste to landfill		Eligibility/Scope of Application	Requirements	Emphasis on Less Consumption
July, 2015	Unknown	This standard covers Zero Waste to Landfill only Other NSF programs cover sustainable manufacturing		Unknown	Divert 99% or more of its waste from landfills Retain documentation and tracking all waste streams Maintain containers to manage waste Establish a program for electronic waste management Employee and contracting training Audits of the facility to ensure these procedures are in place	Unknown
Incineration	Waste-to-Energy	Gasification /Pyrolysis	Co-incineration (cement kilns)	Highest and Best Use	Social/Environmental Justice	Note
Unknown	Waste-to-Energy is allowed for up to 50%, but facilities are required to have a 5-year plan to reduce WtE rates Waste-to-energy may only be counted as diversion after the facility has demonstrated that opportunities for reduction/reuse/recycling have been explored. While the program technically allows up to 50% WTE, it also requires 99% diversion from landfill and accounts for the ash left over from the incineration process, which is typically landfilled		Not specified	It follows the waste hierarchy	N/A	

* The full text of the standard is not available on its website.

Total Resource Use and Efficiency (TRUE) - Green Business Certification Inc.

Year	Certification levels		Promotes Zero waste distinct from Zero waste to landfill	Eligibility/Scope of Application	Requirements	Emphasis on Less Consumption
<p>TRUE (Total Resource Use and Efficiency) Zero Waste rating system announced after rebranding in September 2017 Originally the standard was developed by USZWBC in March 2013 and USZWBC was integrated into GBCI in November 2016</p>	<p>4 certification levels: Certified Bronze with 31-37 points Silver with 38-45 points Gold with 46-63 points Platinum with 64-81 points</p>		<p>Aims to divert all end-use material from landfill, incineration (Waste-to-Energy) and the environment</p>	<p>Any physical facility and their operations, including buildings owned by: businesses, property managers, schools, government agencies and nonprofits</p>	<p>Facilities achieve certification by meeting seven minimum program requirements and attaining at least 31 points on the TRUE Zero Waste scorecard. Project has achieved an average of 90 percent or greater overall diversion from landfill, incineration (waste-to-energy) and the environment for solid, non-hazardous wastes for the most recent 12 months</p>	<p>Redesign: 4/81 points (5%) Reduce: 7/81 points (9%) Reuse: 7/81 points (9%) Zero Waste Purchasing: 9/81 points (11%) Upstream management: 4/81 points (5%) Hazardous Waste Prevention: 5/81 points (6%) Closed Loop: 4/81 points (5%) Innovation: 2/81 points (2%) Total: 42/81 points (52%)</p>
<p>Incineration</p>	<p>Waste-to-Energy</p>	<p>Gasification /Pyrolysis</p>	<p>Co-incineration (cement kilns)</p>	<p>Highest and Best Use</p>	<p>Social/Environmental Justice</p>	<p>Note</p>
<p>Waste-to-Energy, gasification, co-incineration are considered the same as waste incineration. Allows use of thermal processes for up to 10% of total discarded materials but encourages the shift away from burning and burying and continuous improvement Incineration or waste-to-energy is not counted as diversion and 'other processing technologies' should be applied in the way the end product is recovered for productive use in nature or the economy</p>				<p>Includes several credits addressing Highest and Best Use, as well as all 9 points of generation</p>	<p>Not strongly emphasized. It mentions safety risks to employees under the category of Hazardous Waste Prevention</p>	<p>GBCI has adopted the ZWIA Definition of Zero Waste and the ZWIA Zero Waste Business Principles. The Scorecard was developed in part by building on the ZWIA Zero Waste Business Principles and ZWIA Zero Waste Business Recognition Program guidelines</p>

UL 2799A – Environmental Claim Validation Procedure (ECVP) for Zero Waste Classifications

Year	Certification levels		Promotes Zero waste distinct from Zero waste to landfill	Eligibility/Scope of Application	Requirements	Emphasis on Less Consumption
UL2799A was issued in July 2018, based on UL2799 (Environmental Claim Validation Procedure for Zero Waste to Landfill)	Zero Waste to Landfill Silver: 90-94% diversion rate Zero Waste to Landfill Gold: 95-99% Zero Waste to Landfill Platinum: 100%		Redesigning to eliminate or reduce waste and reuse are included as diversion methods but it still approves various thermal technologies as well	Includes Facilities, Events, Fleet Operations, Field Operations, Field Service Operations and Campus/Geography entities but is not limited to those entities	Diversion rate is calculated using one of 5 suggested equations, which consider recycling, composting, anaerobic processing, reuse, reduce, thermal technologies as diversion methods	redesigning to eliminate or reduce waste and reuse have been included in the UL2799 with specific rules for calculation added in edition 3
Incineration	Waste-to-Energy	Gasification /Pyrolysis	Co-incineration (cement kilns)	Highest and Best Use	Social/Environmental Justice	Note
It requires 90% or more waste diversion <u>without Waste-to-Energy</u> for any Zero Waste to Landfill claim For facilities with diversion rates less than 90%, WTE can be counted as diversion when its life cycle net carbon, energy and environmental benefits are reviewed by a technical committee of the certification body				Not specified	N/A	

Zero Waste Canada – Zero Waste Certification Manual

Year	Certification levels	Promotes Zero waste distinct from Zero waste to landfill		Eligibility/Scope of Application	Requirements	Emphasis on Less Consumption
2018	Three certification levels for facilities: Silver, Gold and Platinum Level Silver Level as the base level requires 90% diversion from landfills AND incinerators	Certifies Zero Waste to landfill, incineration or the environment		Facilities	(At the base level) Recognizing eight principles including ZWIA's Zero Waste Definition and Hierarchy, developing a Zero Waste policy including a purchasing guide, full evaluation of supply chain and materials used, 90% diversion from landfills AND incinerators and commits in writing to continuous improvement to reduce the remaining 10% of residue by at least 1% of baseline each year, and documentation.	It is designed in line with ZWIA's Zero Waste Hierarchy of Highest and Best Uses and provides a detailed guideline on reduce, redesign, reuse.
Incineration	Waste-to-Energy	Gasification /Pyrolysis	Co-incineration (cement kilns)	Highest and Best Use	Social/Environmental Justice	Note
Any kind of incineration is unacceptable				Zero Waste Canada has endorsed ZWIA's Zero Waste Hierarchy of Highest & Best Uses	It requires entities to endorse Zero Waste Business Principles, which have social justice elements	

ZWIA Zero Waste Business Recognition Program

Year	Certification levels	Promotes Zero waste distinct from Zero waste to landfill		Eligibility/Scope of Application	Requirements	Emphasis on Less Consumption
Adopted on January 31, 2012	<p>4 certification levels for businesses:</p> <ol style="list-style-type: none"> 1. Achieved 90% Diversion from landfills and incinerators 2. No Burn & Diverted 90% from landfills 3. No Burn & Diverted 90% from landfills; and all remaining discarded materials (residues after reuse, recycling, composting or recovery) must be pre-processed before going to a double-lined landfill that meets EU standards or equivalent 4. No Burn and No Bury of 100% of all discarded materials 	Certifies Zero Waste to landfill, incineration or the environment		<p>Institutions (including schools, colleges, universities, hospitals, prisons and other government facilities), Commercial Industrial (including manufacturing), Venues and Events, Non-governmental organizations and Social Enterprises</p>	<p>Adopted ZWIA goal and incorporated policy of Zero Waste</p> <p>Achieved 90% or more diversion or all discarded resources from landfills or incinerators</p> <p>Meet all solid waste and recycling laws and regulations</p> <p>Commit in writing to continuous improvement to reduce the remaining residue that goes to landfills</p> <p>Submit summary of their Zero Waste initiatives and annual data</p>	<p>Designed in line with ZWIA's Zero Waste Hierarchy of Highest and Best Uses, which starts with the premise of rethink, reduce, reuse and recycle/Compost</p>
Incineration	Waste-to-Energy	Gasification /Pyrolysis	Co-incineration (cement kilns)	Highest and Best Use	Social/Environmental Justice	Note
Not accepted	<p>Recovering energy is only acceptable using systems that operate at biological temperature and pressure, such as sustainable biodiesel from used vegetable oils or biologically or chemically producing ethanol from urban wood, biosolids, manures or food scraps</p>	Not accepted	Not accepted	<p>ZWIA has adopted its own Zero Waste Hierarchy of Highest & Best Uses</p>	<p>It requires entities to endorse Zero Waste Business Principles, which have social justice elements</p>	<p>It is a recognition program, which requires less processes compared to other certification programs</p>

ZWIA Zero Waste Community Recognition Program

Year	Certification levels	Promotes Zero waste distinct from Zero waste to landfill	Eligibility/Scope of Application	Requirements	Emphasis on Less Consumption	
Adopted by the ZWIA Board of Directors on May 23, 2014	<p>2 certification levels for communities:</p> <p>For Communities Working Towards Zero Waste: 10 requirements covering residential collection programs, redesign, incentives for recycling, multi-stakeholder process, data analysis, anti-incineration, quantitative targets</p> <p>For Zero Waste Best Practice Communities:</p> <ol style="list-style-type: none"> 1. Achieved 50% diversion from landfills, incinerators and the environment 2. Achieved 70% diversion from landfills, incinerators and the environment 3. Achieved 90% diversion from landfills, incinerators and the environment 4. No Burn & Diverted 90% from landfills and the environment 	Certifies Zero Waste to landfill, incineration or the environment	Local governments or Regional Districts	<p>Adopted ZWIA goal and incorporated policy of Zero Waste</p> <p>Working towards or achieved 90% or more diversion or all discarded resources from landfills or incinerators</p> <p>Meet all solid waste and recycling laws and regulations</p> <p>Submit summary of their Zero Waste initiatives and annual data</p>	Designed in line with ZWIA's Zero Waste Hierarchy of Highest and Best Uses, which starts with the premise of rethink, reduce, reuse and recycle/Compost	
Incineration	Waste-to-Energy	Gasification /Pyrolysis	Co-incineration (cement kilns)	Highest and Best Use	Social/Environmental Justice	Note
Not accepted	"Recovering energy is only acceptable using systems that operate at biological temperature and pressure, such as sustainable biodiesel from used vegetable oils or biologically or chemically producing ethanol from urban wood, biosolids, manures or food scraps."	Not accepted	Not accepted	ZWIA has adopted its own Zero Waste Hierarchy of Highest & Best Uses	It requires entities to endorse Global Zero Waste Communities Principles, which have social justice elements	It is a recognition program, which requires less processes compared to other certification programs

THE END