

ART ► TO ► ZERO

CLIMATE LANGUAGE GLOSSARY HELPFUL TERMINOLOGY FOR CLIMATE ACTION

ABOUT THIS DOCUMENT:

Moderators

As moderators, Art to Zero (A>0) is responsible for maintaining this document and will ensure that the document is checked periodically and the rules for contribution are being followed.

Contributors

Current contributors include A>0, conserve.org and Art for Acres. We encourage comments and additions from cultural practitioners worldwide to ensure that language is updated and aligns with the needs of visual arts' climate action goals and understanding.

Document Scope

This is a living document, aimed at building awareness and providing contextual language for how visual arts professionals can gain knowledge and be directly involved in climate action. This is not a static document and we invite all, particularly those involved in sustainability practices, to contribute in order to create a unified communications approach in building a resilient future for the visual arts.

Document edited and formatted.

Terms added for consideration in **RED**.

Contributions from Art to Zero, Conserve.org & Art for Acres - 8/2020

Art to Zero's USEFUL CLIMATE TERMINOLOGY FOR VISUAL ARTS PRACTITIONERS

80 x 50: a framework set by many municipalities and jurisdictions with the goal of reducing their carbon emissions by 80% by 2050.

Absolute target: A target defined by reduction in absolute emissions over time e.g., reduces CO₂ emissions by 25% below 1994 levels by 2010.

(Source: <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>)

Bizot Green Protocol: The Bizot Group agreed on the Bizot Green Protocol in 2015, recognizing that museums need to approach long-term collections care in a way that does not require excessive use of energy, while recognizing their duty of care to collections. Guiding principles found here: (Source: <https://www.nationalmuseums.org.uk/what-we-do/contributing-sector/environmental-conditions/>)

Carbon footprint: The amount of carbon dioxide that an organization or person produces and releases into the environment in any given time. Most carbon dioxide produced since the Industrial Revolution is still in the atmosphere.

(Source: <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>)

Carbon neutral: The annual zero net anthropogenic (human caused or influenced) CO₂ emissions by a certain date. By definition, carbon neutrality means every ton of anthropogenic CO₂ emitted is compensated with an equivalent amount of CO₂ removed (e.g. via carbon sequestration), but this term has been used differently on occasion.

(Source: COP 21)

Carbon negative: The term refers to when a business, person, or entity removes more carbon from the atmosphere than it generates.

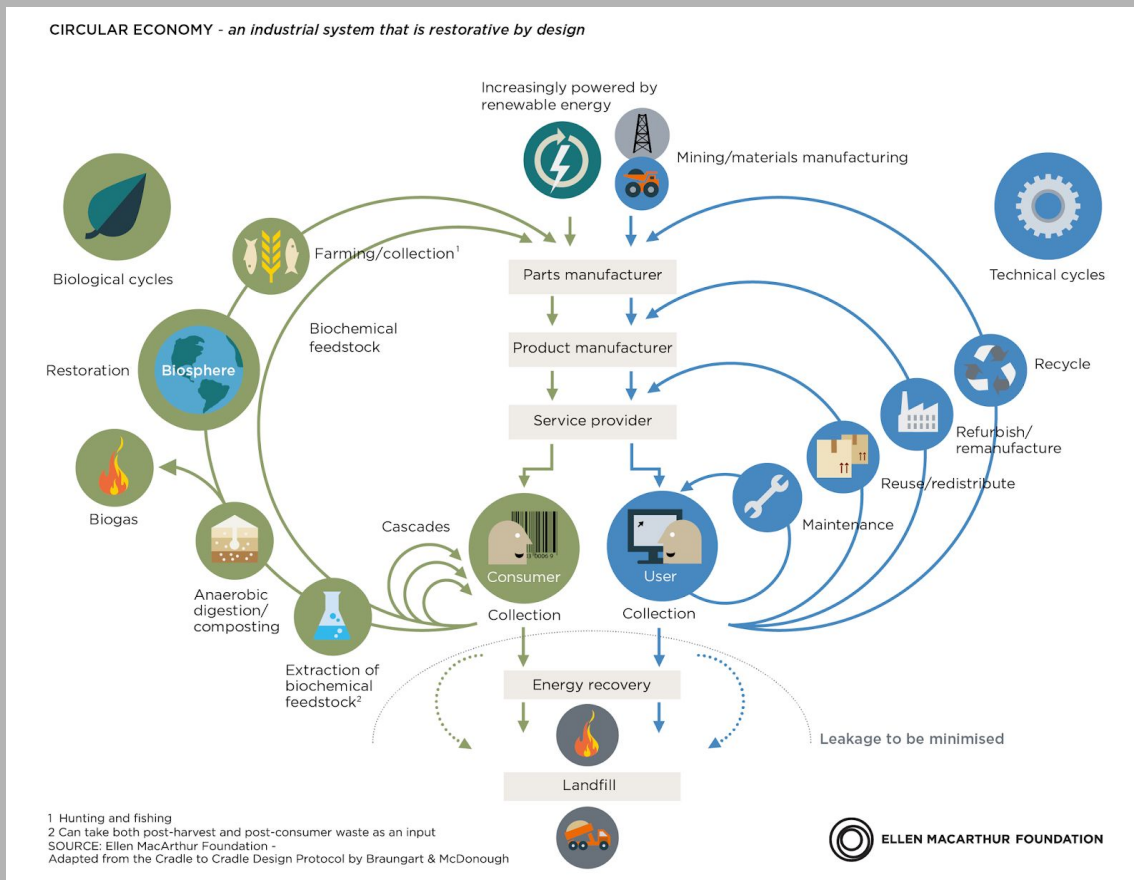
(Source:

<https://www.iea.org/commentaries/going-carbon-negative-what-are-the-technology-options>)

Carbon positive: Similar to Carbon Negative, the term refers to when a business, person, or entity removes more carbon from the atmosphere than it generates.

(Source: <https://www.arborday.org/carbon/carbon-positive.cfm>)

Circular economy: The circular economy refers to an industrial economy that is: restorative by intention; aims to rely on renewable energy; tracks, and hopefully, eliminates the use of toxic chemicals; and eradicates waste through careful design.



(Source: pocentrism, ecocentrism and sentientism.

(Source: Newman, Varner, Lunquist. *Defending Biodiversity*, Cambridge University Press, 2018)

Circular economy principles:

- Design out waste and pollution
- Keep products and materials in use
- Regenerate natural systems

(Sources: <https://www.ellenmacarthurfoundation.org/assets/downloads/Circulytics-definitio ns-list.pdf>

<https://kumu.io/ellenmacarthurfoundation/educational-resources#circular-economy-gener al-resources-map/key-for-general-resources-map/circular-economy-an-overview>)

Climate change vs. global warming: Global warming refers to the overall increase in worldwide temperatures caused by rising greenhouse emissions. Climate change, on the other hand, is a broader term that encompasses the many long-term changes our planet is experiencing, i.e. increasing severe storms, rising sea levels, melting ice.

(Source: *Climate Reality Project*)

Climate justice: “insists on a shift from a discourse on greenhouse gases and melting ice caps into a civil rights movement with the people and communities most vulnerable to climate impacts at its heart,” Mary Robinson. (Source: United Nations Sustainable

Development). Climate justice links human rights and development to achieve a human-centred approach, safeguarding the rights of the most vulnerable people and sharing the burdens and benefits of climate change and its impacts equitably and fairly. Climate justice is informed by science, responds to science and acknowledges the need for equitable stewardship of the world's resources.
(Source: *Mary Robinson Foundation*)

Climate neutral: Carbon neutrality means annual zero net anthropogenic (human caused or influenced) CO₂ emissions by a certain date. By definition, carbon neutrality means every ton of anthropogenic CO₂ emitted is compensated with an equivalent amount of CO₂ removed (e.g. via carbon sequestration), but this term has been used differently on occasion. Climate neutrality is the same concept as carbon neutrality but rather than solely focusing on CO₂ emissions, it extends to zero net anthropogenic greenhouse gas emissions (i.e. including emissions beyond carbon dioxide).
(Source: *World Resources Institute*)

Cultural Heritage Goals (CHGs): The CHGs are a translation of the United Nation's Sustainable Development Goals for cultural heritage professionals.
(Source and more information: <https://en.unesco.org/sustainabledevelopmentgoals>)

Conservation: The preservation or efficient use of resources, or the conservation of various quantities under physical laws. Conservation's goals include protecting species from extinction, maintaining and restoring habitats, enhancing ecosystem services and protecting biological diversity. A range of values underlie conservation, which can be guided by biocentrism, anthropocentrism, ecocentrism and sentientism.
(Source: *Newman, Varner, Lunquist. Defending Biodiversity, Cambridge University Press, 2018*)

Decarbonization: Term framed around decreasing the ratio of carbon dioxide (CO₂) or all greenhouse gas emissions related to primary energy production. While full decarbonization means zero unabated (not captured by carbon sequestration or storage) CO₂ emissions from energy generation and industrial processes, decarbonization doesn't imply zero emissions, as emissions can be balanced by carbon sequestration if adequate reductions or enhanced carbon sinks exist. To effectively communicate the scale of change needed, the term must be accompanied by a timeframe and rates of decarbonization.
(Source: *COP Glossary of Terms*)

Direct emissions: Term used in carbon accounting to refer to the emissions from sources within the reporting organization's organizational boundaries that are owned or controlled by the reporting organization, including stationary combustion emissions, mobile combustion emissions, process emissions, and fugitive emissions.
(Source: <https://www.theclimaterestory.org/tools-resources/reporting-protocols/general-reporting-protocol/>)

Environmental Impact Assessment (EIA): The process of identifying and evaluating the consequences of one economic activity on the environment and, when appropriate, mitigating those consequences. An EIA is used as an aid to public decision-making on larger projects.

(Source: <https://www.epa.gov/sustainability/glossary-sustainable-manufacturing-terms>)

Environmental Management Systems (EMS): A framework that helps a company achieve its environmental goals through consistent control of its operations. The assumption is that this increased control will improve the environmental performance of the company. The EMS itself does not dictate a level of environmental performance that must be achieved; each company's EMS is tailored to the company's business and goals.

(Source: <https://www.epa.gov/sustainability/glossary-sustainable-manufacturing-terms>)

Environmental justice: True environmental justice meaningfully includes all people in the development and enforcement of environmental policies, regardless of the person's race, color, national origin, or income.

(Source: *U.S. Global Change Research Program (USGCRP)*)

Green design: The design of products, services, buildings, or experiences that are sensitive to environmental issues and achieve greater efficiency and effectiveness in terms of energy and materials use.

(Source: <https://www.epa.gov/sustainability/glossary-sustainable-manufacturing-terms>)

Green power: A generic term for renewable energy sources and specific clean energy technologies that emit fewer GHG emissions relative to other sources of energy that supply the electric grid. Includes solar photovoltaic panels, solar thermal energy, geothermal energy, landfill gas, low-impact hydropower, and wind turbines.

(Source: <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>)

Green/Sustainable procurement: A process for buying products with a reduced environmental impact compared to similar products.

(Source: <https://www.epa.gov/sustainability/glossary-sustainable-manufacturing-terms>)

Greenhouse gas (GHG): Greenhouse gases are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of thermal infrared radiation emitted by the Earth's surface, the atmosphere itself, and by clouds. This property causes the greenhouse effect. Water vapour (H₂O), carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄) and ozone (O₃) are the primary greenhouse gases in the Earth's atmosphere. Moreover, there are a number of entirely human-made greenhouse gases in the atmosphere, such as the halocarbons and other chlorine- and bromine-containing substances, dealt with under the Montreal Protocol. Beside CO₂, N₂O and CH₄, the Kyoto Protocol deals with the greenhouse gases sulphur hexafluoride (SF₆), hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs).

(Source: <https://www.ipcc-data.org/guidelines/pages/glossary/glossary>)

Scope 1 GHG emissions: the direct emissions that your activities create — like the exhaust from the car you drive, or for a business, the trucks it drives to transport its products from one place to another or the generators it might run.

(Source:

<https://blogs.microsoft.com/blog/2020/01/16/microsoft-will-be-carbon-negative-by-2030/>)

Scope 2 GHG emissions: indirect emissions that come from the production of the electricity or heat you use, like the traditional energy sources that light up your home or power the buildings owned by a business. (Source: <https://blogs.microsoft.com/blog/2020/01/16/microsoft-will-be-carbon-negative-by-2030/>)

Scope 3 GHG emissions: emissions are the indirect emissions that come from all the other activities in which you're engaged, including the emissions associated with producing the food you eat, or manufacturing the products that you buy. For a business, these emission sources can be extensive, and must be accounted for across its entire supply chain, the materials in its buildings, the business travel of its employees, and the full life cycle of its products, including the electricity customers may consume when using the product. Given this broad range, a company's scope 3 emissions are often far larger than its scope 1 and 2 emissions put together. (Source: <https://blogs.microsoft.com/blog/2020/01/16/microsoft-will-be-carbon-negative-by-2030/>)

Intersectional Environmentalism: Similar to climate justice but a distinct term, this inclusive version of environmentalism advocates for protection of both people and the planet, identifying the ways in which injustice happening to marginalized communities and the earth are interconnected, not minimizing social inequality. Intersectional theory began in 1989 with the scholar Kimberlé Williams Crenshaw. (Source: <https://www.intersectionalenvironmentalist.com/>)

Indirect emissions: A term used in carbon accounting to refer to the emissions that are a consequence of activities that take place within the organizational boundaries of the reporting organization, but that occur at sources owned or controlled by another organization. For example, emissions of electricity used by a manufacturing company that occur at a power plant represent the manufacturer's indirect emissions. (Source: <https://www.theclimateregistry.org/tools-resources/reporting-protocols/general-reporting-protocol/>)

Impact: The adverse or beneficial effect or output of an activity, product, or substance on the environment or human health. (Source: <https://www.epa.gov/sustainability/glossary-sustainable-manufacturing-terms>)

Just transition: A vision-led, unifying and place-based set of principles, processes, and practices that build economic and political power to shift from an extractive economy to a regenerative economy. This means approaching production and consumption cycles holistically and waste-free. The transition itself must be just and equitable; redressing past harms and creating new relationships of power for the future through reparations. If the process of transition is not just, the outcome will never be. Just Transition describes both where we are going and how we get there.

(Source: *Climate Justice Alliance*)

Landfill-free: All waste (or at least 90 percent) generated from operations is reused, recycled, or converted to energy.

(Source: <https://www.epa.gov/sustainability/glossary-sustainable-manufacturing-terms>)

LEED: (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world. Available for virtually all building types, LEED provides a framework for healthy, highly efficient, and cost-saving green buildings. LEED certification is a globally recognized symbol of sustainability achievement and leadership.

(Source: *US Green Building Council*)

Life cycle: 1. Consecutive and interlinked stages of a product system, from raw material acquisition or generation of natural resources to final disposal. **2.** Life cycle stages include raw material extraction, manufacturing/production, transportation, use, and disposal/recycling.

(Source: <https://www.epa.gov/sustainability/glossary-sustainable-manufacturing-terms>)

Life cycle assessment (LCA): Compilation and evaluation of the inputs, outputs, and the potential environmental impacts of a product system throughout its life cycle. The comprehensive examination of a product or service's environmental aspects and potential impacts throughout its lifetime, including raw material extraction, transportation, manufacturing, use, and disposal.

(Source: <https://www.epa.gov/sustainability/glossary-sustainable-manufacturing-terms>)

Life cycle thinking: A concept that integrates existing consumption and production strategies. Life cycle approaches help avoid shifting problems from one life cycle stage to another, from one geographic area to another and from one environmental medium (e.g., air, water, soil) to another.

(Source: <https://www.epa.gov/sustainability/glossary-sustainable-manufacturing-terms>)

Linear economy: Take, make, dispose.

Mitigation: Any actions taken by individuals, governments, or corporations/organizations to reduce greenhouse gas (GHG) emissions.

(Source: *Climate Reality Project*)

Net zero carbon emissions: A term considered a synonym for carbon neutrality. One key difference, however, is carbon neutrality can be achieved at the domestic level with offsets from other jurisdictions, while net zero emissions does not have the same connotation (though theoretically could be met via offsets). Both terms risk overshooting the carbon budget unless complemented by short-term emissions reduction targets.

(Source: *COP 21 Glossary of Terms*)

****Net zero GHG emissions:** A term that can be confused with net-zero carbon emissions, but when accurately used, means *all* greenhouse gas emissions decline to zero, as opposed to just carbon dioxide. This is the same concept as net zero carbon emissions but conveys a net zero emissions target for CO₂ and all non-CO₂ gases.

(Source: COP 21 Glossary of Terms)

The Paris Agreement: a landmark environmental accord that was adopted by nearly every nation in 2015 to address negative impacts of climate change via the goal of limiting global warming to below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels. Implementation of the Paris Agreement requires economic and social transformation, based on the best available science. The Paris Agreement works on a 5- year cycle of increasingly ambitious climate action carried out by countries. Countries' plans for climate action are known as nationally determined contributions (NDCs). (Source:

<https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>)

Product stewardship: A product-centered approach to environmental protection that calls on those in the product life cycle (e.g. manufacturers, retailers, users, and disposers) to share responsibility for reducing the environmental impacts of products.

(Source: <https://www.epa.gov/sustainability/glossary-sustainable-manufacturing-terms>)

Offsets: A unit of carbon dioxide equivalent (CO₂e) that is reduced, avoided, or sequestered to compensate for emissions occurring elsewhere. These offset credits, measured in tons, are an alternative to direct reductions for meeting GHG targets in a cap-and-trade system. In some systems, regulated facilities can buy offset credits from projects located in sectors or countries not legally required to reduce their emissions. The cost of meeting the GHG reduction targets of a cap-and-trade program can be reduced by buying offsets in cases where reducing GHG emissions at uncapped facilities or sectors is less costly than at capped sources. Many businesses and organizations currently buy GHG offsets to help meet voluntary commitments to reduce their GHG emissions. *Verifiable* means credible offset programs requiring that emission reductions be monitored and regularly verified by an independent, qualified third party. *Enforceable* means one credit can only credibly offset one ton of CO₂e emissions; as a result, it must be tracked and it must be possible to enforce its ownership and use in order to avoid double counting. This is usually done via a registry.

(Source: World Resources Institute)

RECs: Renewable energy certificate, or REC (pronounced: rĕk), is a market-based instrument that represents the property rights to the environmental, social and other non-power attributes of renewable electricity generation. RECs are issued when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy resource.

(Source: EPA)

Regenerative: Sustainable practices, by definition, seek to maintain the same, whereas regenerative practices recognize that natural systems are currently impacted and it applies management techniques to restore the system to improved productivity.

(Source:

<https://savory.global/regenerative-agriculture-sustainable-agriculture-differences-holistic-management/#:~:text=Sustainable%20practices%2C%20by%20definition%2C%20seek,the%20system%20to%20improved%20productivity.>)

Renewable energy: Renewable energy, often referred to as clean energy, comes from natural sources or processes that are constantly replenished. For example, sunlight or wind keep shining and blowing, even if their availability depends on time and weather.

(Source: <https://www.nrdc.org/stories/renewable-energy-clean-facts>)

Resilience: In recent years there have been many disparate uses of the terms sustainability and resilience, with some framing sustainability and resilience as the same concept, and others claiming them to be entirely different and unrelated. To investigate similarities, differences, and current management frameworks for increasing sustainability and resilience, a literature review was undertaken that focused on integrated use of sustainability and resilience in an environmental management context. Sustainability was defined through the triple bottom line of environmental, social and economic system considerations. Resilience was viewed as the ability of a system to prepare for threats, absorb impacts, recover and adapt following persistent stress of a disruptive event. Three generalized management frameworks for organizing sustainability and resilience were found to dominate the literature: (1) resilience as a component of sustainability, (2) sustainability as a component of resilience, and (3) resilience and sustainability as separate objectives. Implementations of these frameworks were found to have common goals of providing benefits to people and the environment under normal and extreme operating conditions, with the best examples building on similarities and minimizing conflicts between resilience and sustainability.

(Source: <https://www.researchgate.net/publication/320149863> *Resilience and sustainability Similarities and differences in environmental management applications*)

SMART targets: Refers to targets that are Specific (clearly defined), Measurable (expressed with a number), Achievable (ambitious but not unrealistic), Relevant (the target talks about

circular economy concepts) and Time-bound (there's a deadline to achieve it).

(Source: <https://www.ellenmacarthurfoundation.org/assets/downloads/Circulytics-definitio ns-list.pdf>)

SDGs: The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030.

The 17 SDGs are **integrated**—that is, they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental

sustainability. (Source: <https://www.undp.org/content/undp/en/home/sustainable-development-goals.html>)



Supply chain management: An information management tool which integrates procurement, operations and logistics from raw materials acquisition to customer satisfaction.

(Source: <https://www.epa.gov/sustainability/glossary-sustainable-manufacturing-terms>)

UNFCCC - Created in 1992, the United Nations Framework Convention on Climate Change is an environmental treaty which forms the basis for global policy addressing the climate crisis. Its ultimate goal is to prevent human interference from reaching a critical level by mitigating greenhouse gas emissions. In 2015, the UNFCCC made a groundbreaking step towards environmental justice by signing the Paris Agreement, which united nations around the world under the cause of the global climate effort.

(Source: *United Nations Framework Convention on Climate Change*)

Value chain emissions: Emissions from the upstream and downstream activities associated with the operations of the reporting company.

(Source: <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>)

Verified Carbon Units (VCUs): Under the VCS Program, projects are issued unique carbon credits known as Verified Carbon Units or VCUs. Each VCU represents a reduction or removal of one ton of carbon dioxide equivalent (CO₂e) achieved by a project. The VCS Program is the world's most widely used voluntary GHG program. Almost 1,600 certified VCS projects have collectively reduced or removed more than 450 million tons of carbon and other GHG emissions from the atmosphere.

(Source: <https://verra.org/project/vcs-program/>)

Zero waste: A system-wide approach that seeks to maximize recycling, minimize waste, reduce consumption, and ensure that products are designed to be reused, repaired, or recycled back into the environment or marketplace.

(Source: <https://www.epa.gov/sustainability/glossary-sustainable-manufacturing-terms>)

Zero Net Carbon (ZNC) building: A highly energy efficient building that produces on-site, or procures, enough carbon-free renewable energy to meet building operations energy consumption annually. (Source: Architecture 2030)

Equivalents:

Key Term	Equivalent Term:
Net Zero/Net Zero Emissions	Carbon Neutral, Climate Neutral
Low Carbon	Energy Efficiency
Carbon Neutral	Net Zero Emissions
Carbon Negative	Climate Positive