

GREEN GAB:

A Glossary of Terms used
in Green Business

GREEN FOR ALL CAP GREEN BUSINESS CONTENT





INTRODUCTION

Clean-energy entrepreneurs come from a wide range of business and scientific backgrounds, each with its own set of terms, phrases and concepts. Similarly, new clean-energy regulatory schemes borrow from a range of existing regulatory systems, inheriting a lexicon from each. From this hodgepodge of words and ideas, a new vocabulary is emerging. Understanding this vocabulary is key for entrepreneurs to comply with new state and federal regulations, take advantage of tax incentives and market trends, raise capital from investors, and successfully market their products and services to the growing number of consumers purchasing environmentally friendly products.¹

This guide will help entrepreneurs become more familiar with the basic terms and concepts of the green economy. This will help them successfully launch and scale their businesses, and communicate effectively about the social and environmental impacts of their efforts. A firm understanding of these terms will help entrepreneurs prepare more compelling business plans and presentations, improving their chances of securing funding and endorsements for green business proposals. It will also bring important issues to their attention of which they may have been previously unaware.

Because this remains an emerging marketplace, some definitions are still evolving or contested.

1. A study conducted by Green Seal Inc. and EnviroMedia found that 82% of consumers say they buy green products and services, 60% are looking for minimally packaged goods and 58% are buying green cleaning products. Retrieved from <http://www.enviromedia.com/enviroblog/?tag=education-gap> on November 12, 2009.

GLOSSARY

BIOFUELS

Fuels derived from recently dead biological material, most commonly plants (vs. fossil fuel, which is derived from long-dead biological material). Biodiesel, vegetable oil, and ethanol are all examples of biofuels.

CAP-AND-TRADE

An environmental policy tool aimed at reducing greenhouse gas emissions.² Under a cap-and-trade system, the government sets a mandatory cap on greenhouse gas emissions for businesses, utilities, government agencies, agricultural producers, etc. Once this cap is set, the government distributes allowances or credits to regulated organizations, and then allows them to trade credits to meet the cap. Organizations that need to increase their emissions allowances can buy credits from entities that pollute less (and thus have allowances to spare). This is the “trade” in “cap-and-trade.” The American Clean Energy and Security Act, passed by the House of Representatives in 2009, would establish a cap-and-trade system as the primary vehicle for reducing greenhouse gas emissions in the U.S. Cap-and-trade systems are already in place in Europe³ and in the Northeastern and Mid-Atlantic U.S. (Regional Greenhouse Gas Initiative⁴).

CARBON DIOXIDE (CO₂)

A naturally occurring, heat-trapping **greenhouse gas** in the atmosphere. The amount of CO₂ in the atmosphere has increased dramatically since preindustrial times due to human activities such as burning **fossil fuels**.

CARBON FOOTPRINT

A measure of the amount of carbon dioxide produced by a person, organization, or location for a specific amount of time. An entity’s carbon footprint is used to describe its contribution to the dangerous levels of greenhouse gases in the earth’s atmosphere.

CARBON OFFSETS

A financial tool aimed at reducing greenhouse gas emissions. A polluting entity (individual or organization) can purchase carbon offsets to mitigate the effect of the carbon emissions it produces. The money from that purchase funds a project that prevents greenhouse gas emissions (e.g., reforestation efforts, wind farms, solar installations). This “offsets” the purchasing entity’s polluting activities (e.g., driving, flying, shipping, etc.). There are currently two main markets for carbon offsets: a compliance market and a voluntary market. In the compliance market, companies, governments and

2. EPA information on cap-and-trade: <http://www.epa.gov/captrade/>

3. Retrieved from: http://ec.europa.eu/environment/climat/emission/index_en.htm on December 20, 2009

4. <http://www.rggi.org>

organizations purchase offsets bring their net carbon footprint into compliance with legal caps on emissions set by regulatory agencies. In the voluntary market, individuals and organizations purchase offsets to mitigate the greenhouse gas emissions caused by their activities. A variety of organizations offer carbon offsets,⁵ which in turn fund projects to reduce global greenhouse gas emissions.

CARBON TAX

An environmental tax on emissions of carbon dioxide. The purpose of a carbon tax is to reduce **carbon dioxide** emissions, by making it more costly for companies to re-lease such emissions. Although public debate continues as to whether a carbon tax or a **cap-and-trade** system would more effectively reduce carbon emissions, Congress is leaning strongly towards the latter. Pending legislation in both the U.S. House of Representatives and the U.S. Senate calls for a cap-and-trade regulatory system to reduce emissions (see **Clean Energy Act**).

CARCINOGENS

Any substance that, when exposed to living tissue, may cause the development of cancer. For example, breathing chromium fumes is known to cause lung cancer. Hundreds of chemicals are known to be carcinogens.⁶

CLEAN ENERGY ACT

In June 2009, the U.S. House of Representatives passed the American Clean Energy and Security Act (ACES), also known as the climate bill or the Waxman-Markey Climate and Energy bill. The bill includes a **cap-and-trade** system designed to reduce greenhouse gas emissions 17 percent by 2020. The bill focuses primarily on renewable energy, **energy efficiency**, carbon and other greenhouse gas reduction, and offsets from forestry and agriculture. Green For All successfully advocated for the inclusion of two key provisions in the bill: 1) a “local hire” provision that would require organizations doing federally funded energy-efficiency work to hire workers from the communities in which the work is being done, and 2) funding for green job training through the Green Jobs Act of 2007.⁷ As of this writing, the Senate has not passed climate and energy legislation. When it does, the House and Senate will craft a joint version of their two bills and send it to the president for approval.

CLEAN-ENERGY ECONOMY

According to Pew Charitable Trusts, a clean-energy economy “generates jobs, businesses and investments while expanding clean energy production, increasing energy efficiency, reducing greenhouse gas emissions, waste and pollution, and conserving water and other natural resources.”⁸ (Also see **green economy**.)

5. For a list of carbon offset organizations: http://www.ecobusinesslinks.com/carbon_offset_wind_credits_carbon_reduction.htm

6. Additional information and list of known chemical carcinogens found here: http://www.scorecard.org/health-effects/explanation.tcl?short_hazard_name=cancer

7. More information on the Green Jobs Act: <http://www.greenforall.org/what-we-do/working-with-washington/the-green-jobs-act>

8. Retrieved from http://www.pewtrusts.org/news_room_detail.aspx?id=53254 on November 12, 2009.

CLEAN ENERGY JOBS AND AMERICAN POWER ACT	(also known as the “Kerry-Boxer Climate Bill” after its co-sponsors). A version of climate and energy legislation currently being crafted in the U.S. Senate. If the Senate passes this bill, it will work with the House to reconcile it with H.R. 2454, the American Clean Energy and Security Act, which the House passed in June 2009.
CLEAN TECHNOLOGY OR CLEANTECH	An umbrella term encompassing a class of investments, technologies, and business sectors related to the clean-energy economy .
CLIMATE BILL	See Clean Energy Act.
CLIMATE CHANGE	Sometimes used interchangeably with global warming , “climate change” refers to sustained changes in weather statistics or distribution over long periods of time (decades or longer). The scientific community overwhelmingly — albeit not unanimously — believes that human activities are accelerating climate change, ⁹ posing a threat to humans, wildlife and habitats throughout the world. Some of the potential impacts of climate change include higher temperatures, rising sea levels, melting glaciers and arctic ice, severe droughts and reduced water supplies, severe fires and floods, stronger storms, and increasing rates of mosquito-borne diseases.
CORPORATE SOCIAL RESPONSIBILITY (CSR)	(used interchangeably with “corporate responsibility” or “corporate citizenship”) A type of corporate self-regulation integrated into a business model, which accounts for environmental and social impacts of operations, as well as financial performance (see triple bottom line).
CRADLE TO CRADLE	A philosophy that evaluates products for sustainability and efficiency during each stage of the lifecycle: design, materials sourcing, manufacturing, consumer usage, and post-consumer usage. The key element of this philosophy is to design products that are reused, recycled, or composted, rather than those that end up in a landfill (the latter being the more common alternative, referred to as “cradle to grave,” with the landfill being the grave). ¹⁰
ECOLABEL	A logo or seal used to distinguish a product or service as environmentally friendly. ¹¹ These logos are typically a sign that an independent and reliable third party has reviewed and certified the product or service. Examples of ecolabels include: Green Seal, ¹² Green America’s Green Business Seal of Approval, ¹³ Cradle to Cradle certified, ¹⁴ and Fair Trade Certification. ¹⁵

9. Factsheet on climate change available at: http://css.snre.umich.edu/css_doc/CSS05-19.pdf

10. This philosophy is described in the book *Cradle to Cradle* by William McDonough and Michael Braungart

11. For an index of ecolabels, go to: <http://www.greenerchoices.org/eco-labels/labelIndex.cfm>

12. <http://www.greenseal.org/>

13. <http://www.greenamericatoday.org/greenbusiness/sealofapproval.cfm>

14. <http://www.c2ccertified.com/>

15. <http://www.transfairusa.org/content/certification/>

ENERGY AUDIT	A tool or service designed to assess how much energy a home or office building consumes, and to evaluate possible ways to improve its efficiency. Individuals can perform simple audits themselves or have a professional energy auditor perform a more thorough audit for increased savings. ¹⁶
ENERGY EFFICIENCY	A broad term encompassing a range of technologies that use less energy to provide the same level of energy service as standard or traditional technologies. An example is a fluorescent light bulb, which provides the same amount of light as an incandescent bulb, but lasts longer and consumes less energy. An energy-efficient home may have energy-efficient appliances (which typically come with an Energy Star label), and may be weatherized or retrofitted to optimize efficiency.
FOSSIL FUELS	Fuels, such as crude oil, natural gas and coal, that are produced by the decomposition of fossilized plants and animals, and that have inherently high carbon content. Unlike renewable energy, fossil fuels are finite resources. They cannot be replenished or renewed once they are extracted from the earth.
GLOBAL WARMING	Refers to the well-documented increase in the average temperature of the earth's surface. Global warming is caused by both natural factors and human activities, such as burning fossil fuels , which releases greenhouse gases into the atmosphere. (Also see climate change).
GREEN BUILDING	(used interchangeably with "sustainable building") A building that incorporates elements of green design, such as energy and water efficiency, sourcing of environmentally friendly raw materials, and/or maximized usage of natural daylight. "Green buildings" are also designed (or modified) to minimize their impact on both human and environmental health (see LEED).
GREEN BUSINESS	(used interchangeably with "sustainable business") A business that seeks to solve environmental problems by offering environmentally friendly products or services, or by implementing stringent internal procedures to improve environmental quality or human health for their customers and employees. By Green For All's definition, a green business does a minimum of four things: 1) preserves or enhances environmental quality; 2) provides family-supporting wages and benefits, with safe working conditions; 3) provides access to training and a clear career track; and 4) is inclusive of gender, race, geographic and age diversity.
GREEN CERTIFICATION	Third-party certification of a company, product, or service as environmentally friendly. There are many third-party certifications, some of which include the ability to use a seal or logo to promote a product or service. ¹⁷ (Also see ecolabel .)

**GREEN
ECONOMY**

(used interchangeably with “clean-energy economy”)

The economic sectors aiming to create jobs and wealth by producing goods and providing services that restore and preserve environmental quality. It is a global aggregate of for-profit and social enterprises, as well as nonprofit organizations, all meeting the needs of citizens through the responsible, often local, production and exchange of goods and services.¹⁸

**GREEN
ENTREPRENEUR**

An entrepreneur is a person with a business idea for a product or service who takes the initiative and risks involved to make this idea a reality. A green entrepreneur, also known as an “ecological entrepreneur,” is someone whose product or service benefits the environment, or improves upon a product or service that is currently causing environmental damage. Green entrepreneurs are driven by a desire to solve environmental/social problems, as well as make a profit. They build business models founded upon “triple bottom line” principles, taking into account people, the planet, and profits.

GREEN JOBS ACT

The Green Jobs Act of 2007 authorized \$125 million per year to create an Energy Efficiency and Renewable Energy Worker Training Program as an amendment to the Workforce Investment Act. The Green Jobs Act became Title X of the Energy Independence and Security Act (often referred to as the “2007 Energy Bill”).¹⁹ The Waxman-Markey bill (also known as ACES) appropriated funding for this Act.

**GREEN
MARKETING**

A marketing strategy that promotes the environmental and social benefits of “green” products and services to make them more attractive to consumers. The aim of green marketing is to educate consumers about the positive aspects of what a company does, and/or the negative implications of what the competition does, thereby tapping into the consumers’ pocketbook via their conscience. (Also see **greenwashing**.)

GREEN PRODUCT

There is considerable debate these days over what makes a product “green.” In general, if a product’s design, packaging, manufacture, or source materials have a lower environmental impact than other similar products available on the market, then it could be considered a green product. Examples include non-toxic cleaning supplies and compostable plastic utensils.

GREEN ROOF

(used interchangeably with “living roof”)

Refers to a roof covered with vegetation and soil. Green roofs have many environmental and energy-efficiency benefits, including reducing urban air temperatures, insulating buildings, and creating urban habitats for wildlife.²⁰

18. Definition adapted from: <http://www.globalcitizencenter.org/content/view/2/1/>

19. <http://www.greenforall.org/what-we-do/working-with-washington/the-green-jobs-act>

20. <http://www.greenroofs.org/>

GREEN SUPPLY CHAIN MANAGEMENT (GSCM)

A supply chain is the process by which companies source, design, manufacture and deliver products to customers. Green supply chain management, or “greening the supply chain,” is an effort to reduce the environmental impact of each stage in the life cycle of a product, from the sourcing of the raw materials used to construct it, to its distribution and sale, and finally, to its potential to be recycled, reused or composted.

GREEN-COLLAR ECONOMY

An inclusive clean-energy economy, which aims to develop renewable energy technologies, make America energy independent, and create millions of quality jobs that will lift families and communities out of poverty.²¹

GREEN-COLLAR JOBS

A family-supporting, career-track job that directly contributes to preserving or enhancing environmental quality. Examples include: electricians who install solar panels; plumbers who install solar water heaters; farmers engaged in organic agriculture and some bio-fuel production; and construction workers who build energy-efficient green buildings, wind power farms, and wave energy farms.²²

GREENHOUSE EFFECT

The natural process by which some atmospheric gases absorb and emit infrared solar radiation, trapping heat and warming the earth’s atmosphere. A buildup of greenhouse gases (GHGs) in the atmosphere — caused primarily by humans burning fossil fuels — seems to be intensifying the earth’s natural greenhouse effect, trapping heat in the atmosphere and leading to **global warming**.

GREENHOUSE GASES (GHGS)

Any of the atmospheric gases that contribute to the **greenhouse effect** by absorbing infrared radiation produced by solar warming of the Earth’s surface. They include **carbon dioxide** (CO₂), methane (CH₄), nitrous oxide (NO₂), and water vapor.²³

GREENWASHING

A disingenuous claim made by an organization to promote the organization, or a product/service, as being green or environmentally sustainable, when in fact it is not. *Example:* A company spends millions of dollars positioning itself and its employees as environmentally sensitive, but sells a product that has harmful effects on the community from which its components are sourced or discarded.

LEED

The Leadership in Energy and Environmental Design (LEED) green building rating system, developed by the U.S. Green Building Council (USGBC), provides certification standards for environmentally sustainable construction. These standards take into account energy and water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and responsible raw material sourcing.

21. For additional information on green collar jobs, refer to the book, “The Green Collar Economy: How One Solution Can Fix Our Two Biggest Problems,” by Van Jones.

22. For additional information on green collar jobs, refer to: <http://www.greenforall.org/resources/green-collar-jobs-overview>

23. Please refer to a helpful factsheet at http://css.snre.umich.edu/css_doc/CSS05-21.pdf

LIFE CYCLE ASSESSMENT (LCA)	A way to investigate, estimate, and evaluate the environmental burdens caused by a material, product, process, or service, throughout its life span. Environmental burdens include the materials and energy resources required to create the product, as well as the wastes and emissions generated during the process. Examining the entire life cycle creates a more complete picture of a product's environmental impact, as well as the trade-offs in impact from one period of the life cycle to another. Results of LCAs can be useful for identifying areas in the supply chain with high environmental impact, and for evaluating and improving product designs. ²⁴
LOHAS	An acronym that stands for Lifestyles Of Health And Sustainability. ²⁵ This is a growing market segment that includes a variety of products and services including health, fitness, sustainable lifestyles, environmental stewardship, personal development, and social justice.
PHOTOVOLTAICS (PV)	The field of technology and research related to converting sunlight into electricity using solar cells.
POLLUTION	The introduction of harmful substances or products into the environment (air, water, etc.), which adversely affects the health of living organisms.
RENEWABLE ENERGY	(used interchangeably with "alternative energy" or "clean energy") Energy generated from renewable natural resources, such as sunlight, wind, tides and geothermal heat. Because these resources are naturally replenished, they can be considered infinite (unlike fossil fuels).
SOCIAL ENTERPRISE	A mission-driven organization that sells goods or services and uses market forces to drive social change at a local or global scale. (This term has no widely accepted definition; this is a working, general definition.)
SOCIAL RETURN ON INVESTMENT (SROI)	A measurement describing the social impact of dollars invested in (or donated to) a non-profit or for-profit business. ²⁶ For example, if a social enterprise was selling books and donating a portion of their profits to increase literacy in a community, then an SROI outcome they could measure and cite would be increasing literacy rates in that community.
SOLAR ENERGY	Energy from the sun that is converted into thermal or electrical energy, often through the use of photovoltaic technology (solar panels).
SOLAR PANEL	An array of photovoltaic cells used to convert energy from sunlight into electricity.

**SOLAR
THERMAL**

A system that captures energy from sunlight, and uses a heat exchanger to heat a liquid. (This is different from **photovoltaics**, which convert sunlight directly into electricity.) Solar thermal water heaters are commonly used as an **energy-efficiency** tool to heat water for buildings, thereby reducing the amount of energy needed to heat water.

SUSTAINABILITY

As described by the Bruntland Commission, “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”²⁷

**TRIPLE BOTTOM
LINE**

A business concept that measures an enterprise’s success in terms of the three P’s — people, planet and profit — that together capture an expanded spectrum of values and criteria for evaluating outcomes.

**WAXMAN-
MARKEY BILL**

The Waxman-Markey Climate and Energy bill is now the American Clean Energy and Security Act (ACES). The U.S. House of Representatives passed this bill in June 2009. The bill aims to “create clean energy jobs, achieve energy independence, reduce global warming pollution and transition to a clean energy economy.”²⁸ (Also see **Clean Energy Act**.)

WEATHERIZATION

(also known as “weatherproofing” or “retrofitting”)

Protecting a building and its interior from external forces (i.e. sunlight, wind and precipitation), with the ultimate goal of reducing energy consumption and optimizing **energy efficiency**. These measures can dramatically reduce household utility bills, and are often times referred to as the “low hanging fruit” of the clean-energy equation because they are relatively low-cost and require very little advanced technology, making them easy to implement.²⁹

**WIND ENERGY
OR WIND POWER**

The conversion of wind energy into electricity, often times through the use of wind turbines, which can be located on land, offshore, or mounted on buildings.
