

Equity - Environment - Economy

## What does it mean to create an ESG strategy which builds trust and drecreases your carbon footprint through the development of renewable energy solutions?



Well-run companies have recently learned that they can achieve higher financial goals while operating a more sustainable organization while benefiting the environment and future generations. Building a more sustainable company will help create long-term relationships with its investors, employees, suppliers, and customers.

The installation and long-term use of our renewable energy and/or battery energy storage system solutions will help your company with all three legs of its ESG goals. EIA (U.S. Energy Information Administration) estimates show the average cost of electricity in the U.S. will rise by 14% by 2030 and 30% by 2040. Our Solar PV system will fix your electricity costs at today's value and decrease simple payback times and improve IRR as utility rates increase. All Tier I solar panels we use in our designs have a minimum guarantee to produce at least 80% of the original energy production on year 25, with some manufacturers now guaranteeing 90% at year 30. We currently are extending the expected life of Tier I solar panels to exceed 35 years, with some older panels still producing over 80% of their original production at year 40 (Arco solar)!

We all know the most expensive expenditures are the result of losing a relationship:

- An employee (finding and training costs)
- Supplier (replacement and re-engineering)
- Customer (relationship building/re-acquisition cost)
- Investor (rebuilding trust)

Your ability to operate sustainably using the ESG framework will help your company maintain and grow trust and loyalty with your employees, business partners, customers, and investors.

There is more demand for companies to provide information to the public which demonstrates their high-sustainability and low-carbon attributes while easily describing the environmental impact of their products and services. You can act now to stay ahead of the new U.S. SEC legislation requiring all companies stating ESG milestones to disclose their actual accomplishments legally. These scheduled ESG reports will protect all investors making financial investment decisions using the reported metrics, "it's all about accurate, real data."



Equity - Environment - Economy

As with most sustainable business solutions considering life cycle costs, innovative companies look at the long-term advantages of a decision before adopting it. The goals of any board should be to direct the company to maximize its ability to achieve its successful existence in perpetuity. Corporate agreements need to consider how to minimize future operating costs, which assist its ability to take care and nourish its employees and community with our sustainable energy solutions helping you reach your goals.



#### A few definitions:

*3E's or 3P's* – Equity, Environment, Economy or People, Planet, Profit also discussed as the "triple bottom line" where companies create a culture from the business plan down to create an organization that has a culture to consider its people first (employees, suppliers, and customers), the environment second with corporate profit becoming less of a priority, still essential but not the shareholders driving force.

**ESG** – Environmental, Social, Governance criteria are operational requirements companies use to create a framework that allows socially concerned investors an "easy" method to compare companies measurably. The metrics determine how well its operations, products, and services impact the environment, society, employees, suppliers, business partners, and customers. The cornerstone of any ESG framework is continuous improvement with accurate scheduled monitoring, including transparent oversight. The corporate metrics need to be traceable to support the published information on how the company treats the planet and people and if the company is ethically repeatably operated.

**CO2 Equivalent (CO2e)** – This is the universal unit of measurement to indicate the global warming potential (GWP) of each greenhouse gas, expressed in terms of one unit of carbon dioxide. It is used to evaluate releasing (or avoiding releasing) different greenhouse gases against a shared basis (GHG protocol).



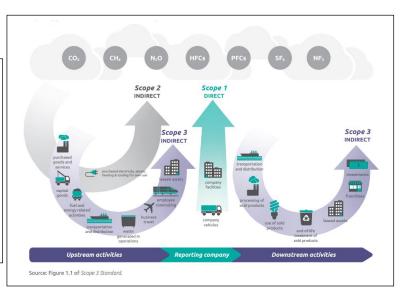
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**CSR** – Corporate Social Responsibility is designed to cover the overarching social, environmental, and economic concerns in a company's policies, practices, and decision-making, helping the company be accountable. These self-regulating programs are the precursor to the ESG profile, now the primary lens investors, consumers, employees, and other stakeholders use to decide how to spend their money and time. Companies are now leveraging their CSR programs to drive ESG outcomes.

**GHG** – Green House Gas is any gas that absorbs infrared radiation emitted from the earth's surface and reradiates it back to the earth's surface, thus contributing to the greenhouse effect (Britannica). Carbon dioxide, methane, nitrous oxide, ozone, and water vapor are the most prominent greenhouse gases.

**SCOPE 1 EMISSIONS** – Emissions from operations that are owned or controlled by the reporting company. **SCOPE 2 EMISSIONS** – Indirect emissions from the generation of purchased or acquired electricity, steam, heat or cooling consumed by the reporting company.

**SCOPE 3 EMISSIONS** – All indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both the upstream and downstream emissions.



LCA

RECYCLE/COMPOS

LEAST PREFERR

Image Credit: EPA

**LCA** - Life cycle analysis is a methodology designed to assist businesses in measuring and quantifying the end-toend environmental and economic impacts of a product, process, or service. This tool is used to evaluate each step in the product or service life cycle. It considers how the design, processing of the raw materials, manufacturing, packaging, distribution, use, recycling, final disposal, and energy used determine the total financial and environmental impact. The data generated by the LCA study can be used to prioritize and assess opportunities to create added value across a product life cycle. This information can also assist with the corporate ESG report showing both the negative impact and benefits used in calculating the ESG score.

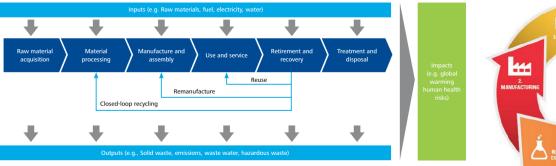


Figure 1: The Product Life Cycle (Adapted from ISO 14040:2006, Environmental Management - Life Cycle Assessment - Principles and Framework)



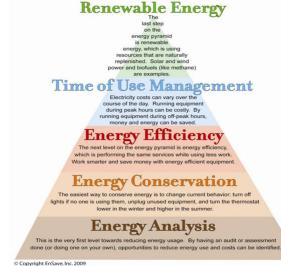
**Net Metering** is a policy offered by electricity suppliers that monetize the credit provided at or near the retail rate to the residential or C&I customer for the on-site renewable energy.

**Operating Sustainably** – We all agree that the less pollution we create and the fewer non-renewable resources we all use to live or produce products and services will benefit us all and usually decrease our operational costs. A sustainable business aims to provide for its employees, partners, investors, and customers for the long term.

**REC** – Renewable Energy Certificate is a type of energy attribute certificate used in the U.S. and defined as representing the property rights to the generation, environmental, social, and other non-power attributes of renewable electricity generation. A REC is typically one megawatt-hour (1MWh or 1,000kWh) of electricity with the value assigned by the appropriate REC purchaser or trading organization.

Let us help you and your company apply a renewable energy solution at one or more of your facilities, immediately decreasing your operating cost and carbon footprint while futureproofing your electricity supply costs. We will confirm each location's net-metering or avoided cost value and the ability to sell RECs to calculate simple payback and IRR correctly. Each facility's demand charges will also help us confirm the financial model to determine if a battery energy storage system would benefit our offering. We will design the system(s) to allow your facility department(s) to consider being self-consumptive through the construction of a Nano or Microgrid, providing critical backup load support in the event of a power failure. We can design the system to work with any existing emergency backup generation system.

Nearly 40% of global greenhouse gas emissions can be traced to energy generation, and at least half of that energy is used by commercial or industrial (C&I) entities. We recommend every company first look to reduce these emissions through energy conservation, energy efficiency upgrades, and supply switches to onsite renewable energy production.



Our solar energy solution will allow you an easy way to ensure your employees, investors, business partners, and customers learn you are making the necessary steps to meet or exceed your ESG initiatives while immediately improving your ESG score.

We can easily install a dashboard on your website showing your stakeholders the instantaneous power production and the environmental attributes your company is earning, building trust by improving the environment through the reduction of GHG (Green House Gas) emissions.

*"We do not inherit the Earth from our ancestors; we borrow it from our children."* – Native American Proverb