

IMPACT INVESTING MONTHLY

February 2025

Your monthly update on impact investing

Impact Investing at AOWM

Seeking companies that
turn a profit making a
sustainable impact on
society and the
environment

February's update includes a company highlight on HASI, charts on global energy consumption, and links to further resources on these fronts. As always, if you would like to talk about impact investing in general or your impact portfolio specifically, please do not hesitate to email me.

Grace and Peace,



Nelson Reveley
Impact Analyst & Advisor
nelson@aowealth.com

Highlight on HASI

HASI (hasi.com) is an investment firm that seeks to “make climate positive investments with superior risk-adjusted returns.” Founded in 1981 and based in Annapolis, MD, HASI invests in projects that facilitate the energy transition from fossil fuels to renewables. All of its investments are “neutral to negative on incremental carbon emissions or have some other tangible environmental benefit, such as reducing water consumption.”

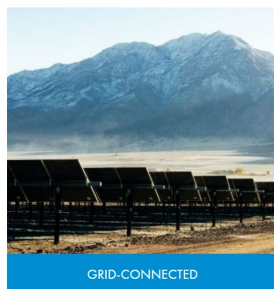


HASI focuses on three markets: 1) *Behind-the-Meter* projects tied to energy efficiency, residential solar, and community solar (~46% of the portfolio); 2) *Grid-Connected* utility-scale projects in wind, solar, and energy storage (~40% of the portfolio); and 3) *Fuels, Transport, and Nature* projects connected to renewable natural gas, decarbonization of transportation fleets, and ecological restoration (~13% of the portfolio). HASI is short for Hannon Armstrong Sustainable Infrastructure Capital. Learn more about HASI [here](#).

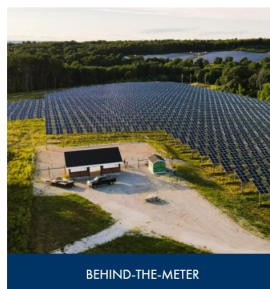
Investment Examples



RNG



Wind, Solar



Community Solar, C&I Solar

Charts of the Month

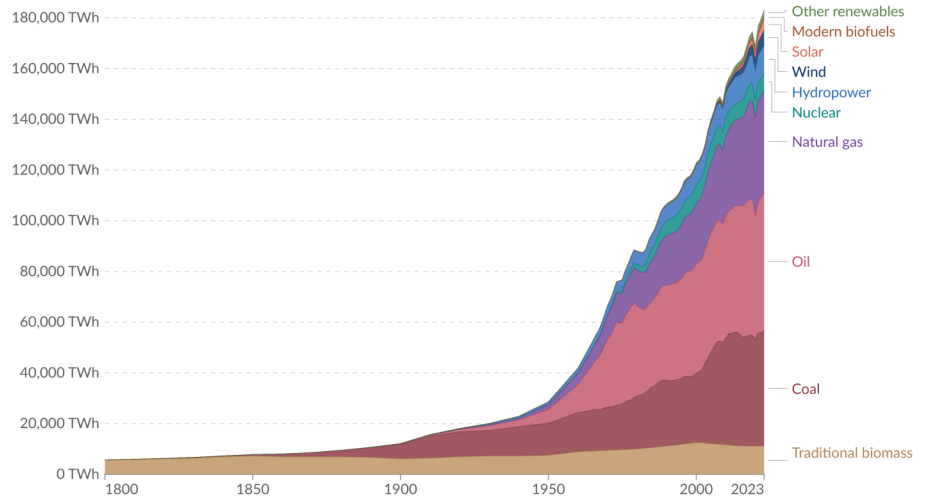
(Click on the charts for a larger view and citations)

Our charts of the month comes from the [Our World in Data](#), the [Energy Institute](#), and the book *Energy Transitions* by Vaclav Smil. These charts provide an overview of our global energy consumption by source dating back to 1800. You can see the explosion in energy use that has occurred over the last century. By comparison, in 1800, we only consumed ~3% of the energy we do today. In 1900, we still only consumed about 6% of the energy we do today, with roughly half of that still coming from burning wood, crop waste, or charcoal.

Global consumption of energy has grown dramatically since the 1950s, along with the massive increase in global population (~1 billion in 1800, 1.6 billion in 1900, 2.5 billion in 1950, and 8 billion of us today; see more [here](#)). As of 2023, about a sixth of our energy comes from renewable sources. See more on energy in our world [here](#) and on the transition to renewables [here](#), as we continue the two-plus centuries long journey from wood to coal to oil to gas to renewables.

Global primary energy consumption by source

Primary energy¹ is based on the substitution method² and measured in terawatt-hours³.

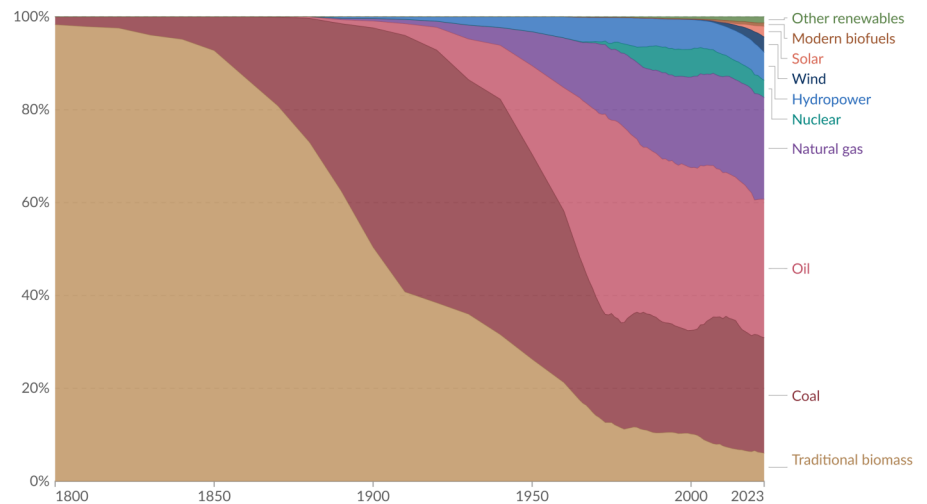


Data source: Energy Institute - Statistical Review of World Energy (2024); Smil (2017)

Note: In the absence of more recent data, traditional biomass is assumed constant since 2015.

Global primary energy consumption by source

Primary energy¹ is based on the substitution method² and measured in terawatt-hours³.



Data source: Energy Institute - Statistical Review of World Energy (2024); Smil (2017)

Note: In the absence of more recent data, traditional biomass is assumed constant since 2015.

1. Primary energy: Primary energy is the energy available as resources – such as the fuels burnt in power plants – before it has been transformed. This relates to the coal before it has been burned, the uranium, or the barrels of oil. Primary energy includes energy that the end user needs, in the form of electricity, transport and heating, plus inefficiencies and energy that is lost when raw resources are transformed into a usable form. You can read more on the different ways of measuring energy in our article.

2. Substitution method: The 'substitution method' is used by researchers to correct primary energy consumption for efficiency losses experienced by fossil fuels. It tries to adjust non-fossil energy sources to the inputs that would be needed if it was generated from fossil fuels. It assumes that wind and solar electricity is as inefficient as coal or gas. To do this, energy generation from non-fossil sources are divided by a standard 'thermal efficiency factor' – typically around 0.4. Nuclear power is also adjusted despite it also experiencing thermal losses in a power plant. Since it's reported in terms of electricity output, we need to do this adjustment to calculate its equivalent input value. You can read more about this adjustment in our article.

3. Watt-hour: A watt-hour is the energy delivered by one watt of power for one hour. Since one watt is equivalent to one joule per second, a watt-hour is equivalent to 3600 joules of energy. Metric prefixes are used for multiples of the unit, usually: - kilowatt-hours (kWh), or a thousand watt-hours. - Megawatt-hours (MWh), or a million watt-hours. - Gigawatt-hours (GWh), or a billion watt-hours. - Terawatt-hours (TWh), or a trillion watt-hours.

Resources

Chasing Carbon Zero

NOVA, Season 50 Episode 6
April 26, 2023
(53 min video)

Energy and Civilization: A History

Vaclav Smil
November 13, 2018
(562 pgs)

The Origins of U.S. Renewables

HASI's Climate Positive Podcast
September 23, 2021
(37 min listen)

The energy transition will be much cheaper than you think

The Economist
November 14, 2024

What is Impact Investing?

The term “**Impact Investing**” focuses on investments made “*with the intention to generate positive, measurable social and environmental impact alongside a financial return.*”¹ Many people talk about this intersection of social, environmental, and financial values as a focus on the **triple bottom line** of **people, planet, and profit.**² Others also highlight the ways that environmental, social, and financial values are really “**blended values,**”³ given that the operations, products, and services of any business always have effects (whether positive or negative) on society, the environment, and the financial bottom line.

“**ESG**” is a term that stands for “Environmental, Social, and Governance” factors that can affect a company’s long term financial health as well as well-being for broader society and the environment. The term ESG was coined in a 2004 United Nations report entitled, “Who Cares Wins: Connecting Financial Markets to a Changing World,” and this report highlights the ways “*successful investment depends on a vibrant economy, which depends on a healthy civil society, which is ultimately dependent on a sustainable planet.*”⁴

ESG analysis usually focuses primarily on how a changing world (socially and environmentally) might affect a company’s financial return. Impact analysis usually focuses on how a company’s operations and products affect society and the environment. The two types of analysis are distinct but complementary and can be used to help you blend your values with your investments.

Sources

¹ Thegiin.org; see also rockefellerfoundation.org/from-the-archives/global-impact-investing-network-giin/

² “Triple bottom line,” *The Economist*, Nov 17, 2009. economist.com/news/2009/11/17/triple-bottom-line

³ Blendedvalue.org

⁴ UNepfi.org/fileadmin/events/2004/stocks/who_cares_wins_global_compact_2004.pdf

IMPORTANT DISCLOSURES

Alpha Omega Wealth Management, LLC (“Alpha Omega”) is a registered investment advisor headquartered in Richmond, VA. Alpha Omega and its representatives are in compliance with the current filing requirements imposed upon registered investment advisors by those states in which Alpha Omega maintains clients. Alpha Omega may only transact business in those states in which it is registered, or qualifies for an exemption or exclusion from registration requirements. A copy of Alpha Omega’s current written disclosure statement is available upon request.

Please remember that past performance may not be indicative of future results. Different types of investments involve varying degrees of risk, and there can be no assurance that the future performance of any specific investment, investment strategy, or product (including the investments and/or investment strategies recommended or undertaken by Alpha Omega Wealth Management, LLC-“Alpha Omega”), or any non-investment related content, made reference to directly or indirectly in this document will be profitable, equal any corresponding indicated historical performance level(s), be suitable for your portfolio or individual situation, or prove successful. Due to various factors, including changing market conditions and/or applicable laws, the content may no longer be reflective of current opinions or positions. Moreover, you should not assume that any discussion or information contained in this document serves as the receipt of, or as a substitute for, personalized investment advice from Alpha Omega.

SOCIALLY RESPONSIBLE INVESTING LIMITATIONS

Socially Responsible Investing involves the incorporation of Environmental, Social and Governance considerations into the investment due diligence process (“ESG”). There are potential limitations associated with allocating a portion of an investment portfolio in ESG securities (i.e., securities that have a mandate to avoid, when possible, investments in such products as alcohol, tobacco, firearms, oil drilling, gambling, etc.). The number of these securities may be limited when compared to those that do not maintain such a mandate. ESG securities could underperform broad market indices. Investors must accept these limitations, including potential for underperformance. Correspondingly, the number of ESG mutual funds and exchange-traded funds are few when compared to those that do not maintain such a mandate. As with any type of investment (including any investment and/or investment strategies recommended and/or undertaken by Alpha Omega), there can be no assurance that investment in ESG securities or funds will be profitable, or prove successful.