RA-ESG
SOLAR SOLUTIONS

No Sun, no Life...

INVESTOR 101

RA-ESG.COM
RA-ESG PLC
London, England

A SHORT INVESTOR'S GUIDE TO RA-ESG

ESG Investment

ESG is the acronym for Environmental, Social and Governance, and represents a set of standards and criteria used by social and environmentally-conscious investors when considering potential investment opportunities.

In basic terms: we see the "Social" and "Governance" groups as very much "people-focused" as in the majority of cases they deal with stakeholders, employers, and socially conscious issues such as diversity, inclusion, gender, racism, social and corporate morals and ethics. As much as we applaud and support such efforts it's not what we excel at.

The "Environmental" aspect, and especially the generation of clean sustainable energy is our core competence. We firmly believe that our planet's ability to generate sustainable, clean energy as an alternative to fossil fuels is possibly the most important challenge facing the human race; as with free energy comes clean drinking water and abundant food.

Some investors see socially responsible ("ESG") investing and earning serious returns on investment ("ROI") as mutually exclusive. RA-ESG does not believe that the ESG vs ROI argument is valid, in contrast, we see that the sudden spike in energy prices, the lack of oil and gas due to the Ukraine conflict and the decolonisation of Africa are all going to lead to even higher energy prices; and these and other global issues present us with tremendous investment opportunities.

To keep things simple, we are going to divide this report into three part:

- Why invest into Solar Energy now?
- How do we make money?
- How do I invest?

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WHY INVEST IN SOLAR ENERGY NOW ?

- The cost of energy is increasing year on year, and much quicker than wages. In the last 2 years, inflation in the price of energy has fluctuated between an increase of 16% to 42% per annum year on year.

- Solar Energy has become the cheapest, safest and cleanest source of energy in the world.

- The capital cost of installing a solar facility is less than all other sources of electricity (kWh of energy per US dollar spent).

- Once built, a solar facility requires very little maintenance (try leaving a nuclear power plant unmaintained and without coolant for any significant time period).

- Solar works on any scale, a tent, a house or an entire country.

- No mining, no radioactivity, no toxic waste. Solar is the cleanest form of energy.

- A very clear and easy-to-understand timeline of “money in” to “money out”, as there is little in the way of risk or chance that the sun will not shine

- As the world transitions to Electric Vehicles, our reliance on Solar will become greater; of course, the recent legislation forcing manufacturers to transition to electric vehicles is great news too (although RA-ESG believes it is extremely optimistic in terms of its trigger date); in any case, the legislation comes with two serious caveats;
  - It is all very well not putting petrol or diesel in your tank, but not much point if you’re plugging in at home (or work) and using fossil fuel generated energy to charge your car! The only thing you’re changing is “where” you use the fossil fuel, not if!
  - Governments haven’t made clear how they intend to replace the £00.64p tax they levy on every litre of Petrol or Diesel (£24b per annum).

- The best answer to the question is to ask yourself “If I could invest in solar energy for my home at the same cost, and pay it at the same rate as my current electricity bill, secure in the knowledge that in 5 years’ time I would never pay for electricity ever again, would I do it?” This is the same question as what every government, municipality, business and homeowner should be asking themselves today.

- Even forgetting the climate crisis, carbon emissions, electric vehicle legislation and the new ESG/CSR corporate audit responsibilities; the sun still remains the most abundant form of free energy on earth.

Typing “Price of Electricity in the UK” into Google will give this:

“The actual cost of electricity per kWh is £00.52p per kWh”

The cost of generating it on a SolarFarm is nearer £00.04p per kWh.

There is a lot of room between £00.04p and £00.52p!

A 400% margin would equate to only £00.16p which is under half of the UK tariff domestic rate even including the Rate Cap (which is shortly to come to an end).

HOW DOES RA-ESG MAKE MONEY ?

- RA-ESG mainly funds 3 different types of Solar projects:

- Solar Farms
- Trading in Solar Technology
- Research and Development into Solar Technology innovation.

- A Solar Farm requires solar panels, batteries, inverters, as well as planning, fences, roads and other infrastructure. Let’s say that all of this costs $10,000,000.

- RA-ESG will invest its funds to pay for those costs.

- In return, when the Solar Farm is completed it will sell cheap, clean energy for the next 30 years. Such energy transactions are contracted in the form of PPAs (Power Purchase Agreements). These agreements are pledged to the security trustee to secure our investors’ funds.

- On average, $10m would build a 10MW (Megawatt) Solar Farm, and...

- A 10MW Solar Farm would produce 21,000 MWh (21,000,000 kWh) of energy per annum.

- If the energy was sold at only $00.25c per kWh that would equate to a return of $5,250,000 per annum (or 52.5% of the build cost per year). This figure ignores the fact that the price charged for electricity will rise year on year with inflation over the 30-year period.

- A solar farm will last 30 years on average, leading to a return of $157,500,000 in revenue (does not account for maintenance, security and repairs).

Trading In Solar Technology.

- With so much growth in the Sustainable Energy sector, the demand for the components that make up solar facilities is increasing year after year. Solar Panels, Batteries, Inverters, sub-station assemblies, and peripherals such as cabling and racking are all in high demand.

- Of course, with such demand comes competitive pricing, but with such a fast turnover of stock, the smaller margins are more than compensated by the speed with which products are sold and reordered.

- The average mark-up on solar components would be in the region of 20%-25%, but when considering that the buy-sell transaction for a business would happen at the very least on a monthly basis, this would mean an initial investment of £100 in stock would return 120% every month; thus £100 in January would equate to a capital and profit figure of £892 if reinvested by the end of the year, or 892%.

- Therefore, even if RA-ESG only turned over its stock every 3 months (instead of monthly) and only charged a mark-up of 10% (instead of 20%) it would still experience a 45% Return on Investment per annum.

- It's not only the physical components we sell, our technical team, headed up by ex-military and specialist engineers provide technical feasibility studies to the market sector, and this provides income to RA-ESG too.

Research and Development into Solar Technology Innovation.

- Almost on a daily basis, new, innovative ways are being found to generate, store and transport power; and although our prime focus is on the Solar market, great strides are also being made in wind, hydro/tidal and even Hydrogen. RA-ESG trails the markets and connects with entrepreneurial and start-up businesses developing new and exciting technology in the sustainable energy arena.

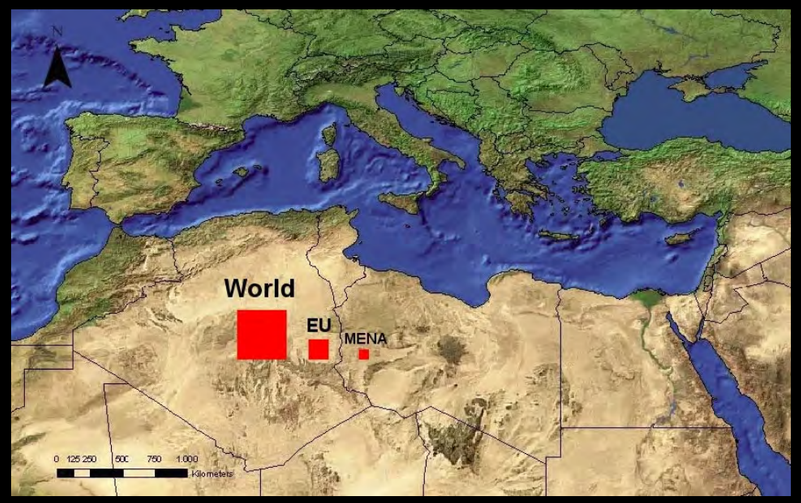
- Some of these technologies are specifically designed to bring easier and cheaper access to electricity for the 1.2 billion impoverished and disenfranchised people without it.
  - No electricity means:
  - Poor sanitation,
  - Limited medical resources,
  - No access to the internet,
  - Extremely low levels of education and
  - Malnourishment due to lack of refrigeration.

- Sometimes, the profit margins are not always as big as Solar Farms or Trading, but in the scheme of things, small investments into life-changing initiatives can have their own rewards. We all feel good when a small community medical clinic can switch on their first electric light, or when a child can read their first online book.

DOES IT WORK?

The large red square above represents the amount of solar panels required to power the entire world, the next one the EU (including the UK), and the next, Northern Africa and the Middle East. The current estimations are that if less than 1.5% of the Sahara was covered in Solar panels, we could power the planet. Naturally, there are challenges, political instability, national security, war, and raising investment required in the first place (although we seem to be able to pile trillions into the war and military sector).

On the following page we break down a typical RA-ESG type investment, how it progresses, and the return on investment ("ROI") it produces.



A Point To Ponder Whilst Perusing Our Business Model;

"The unpopulated area of the Sahara desert is over 9 million square kilometres, which if covered with solar panels would generate 630 Terrawatts of electricity, our entire planet only uses 15 Terrawatts. Yet, 600 million people in Africa alone do not have access to Electricity"

FINANCIAL LOGIC

As an example, we'll use The UK Energy Guide website which tells us that "The actual cost of electricity is £00.52p per kWh". Due to subsidies and price caps, there currently exists a difference between what it COSTS to generate electricity and what is charged to consumers.

Now let's take an imaginary energy requirement, a medium-sized business. In this type of building the average electricity usage will be about 70,000 kWh of energy per annum (combined gas and electricity, assuming gas is used for heating).

If that business only had to pay £00.30p per kWh that would equate to £21,000 per annum.

Now let's look at replacing the entire energy requirement with Solar.

For 70,000 kWh per annum, and to cover 100% of the energy bill, assuming 4.5 hours of sunshine per day, you would need a 58 kW solar array. This would cost approximately £60,000 (not including batteries).

That equates to THREE YEARS of the existing electricity bill, which is going to go up with inflation every year anyway.

Let's add some batteries, and some interest on a loan to buy and fit everything in the first place. Even taking a figure of £100,000 expenditure over a 5-year period, that equates to £20,000 per annum... less than the current electricity bill!

Now look at the situation AFTER the 5-year loan... totally free electricity for the next 25 years (apart from a few small maintenance, cleaning a part replacement issues).

The above scenario applies no matter whether the project is a small house or a large industrial complex.

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