

# WHAT IS GREEN

## SOFTWARE ENGINEERING



The environmental problem is unequivocally one of the most pressing problems of our time. No one should remain indifferent - this issue concerns everyone. Responsibility for the future makes us think about our ecological footprint on an ongoing basis. When planning a new business or thinking about any changes, one should think about what impact it will have on the Earth. Will it reduce carbon emissions and electricity consumption, will we be able to reuse the production in the future? If your investment is profitable for you and the Earth, it is double awesome. In order to sort the myriad of companies and not get lost, ESG criteria (Environmental, Social and Governance) is to help you. It is a non-financial measure of an assessment company's performance regarding environmental safeguards, stakeholders' relationships and governance policy: transparent accounting, diversity on boards, corruption, and so on. Its popularity is still growing. Now there are \$330 billion in assets under management in ESG funds, and inflows will probably continue to rise in 2022. ESG commitment entails the strong interest of investors in cleantech companies. In 2021, an all-time high investment in cleantech was recorded (US \$66.3bn). Crowdfunding platforms, however, were a big part of the total investment. It is undoubtedly a positive and inspiring trend. The biggest investment flows occurred in the USA, China, and the UK. Cleantech solutions can be an effective weapon in responsible hands in the fight for a green future with net zero emissions and negative climate consequences.

### What is cleantech?

Cleantech is an umbrella term defined as technologies whose primary goal is to reduce or prevent a negative impact on the environment. You may also see "green tech" or "eco-technology" with the same meaning. It can be alternative waste-free or low-waste manufacturing, or technology that directly alleviates or removes existing pollution, or an app that calculates the number of emissions and helps to speed up decarbonisation. Cleantech has a fairly extensive scope of application, as everything, even in our daily life, can be done with an eye to clean technologies. Normally, there are five areas to mark out:

- agriculture & food,
- transportation & logistics,

- resources & environment,
- energy & storage,
- materials & chemicals.

The most invested sectors are the first two on the list, although energy and power areas experienced significant growth in 2021. Anyway, there are a variety of problems in each group and their multiple solutions that probably exist as an idea occupying your mind. Our Magora team is ready to maintain any project and create it from scratch. We meet high green technology standards, no matter if it is a website to organize cloth reuse in your neighborhood or a bespoke app for the continuous tracking of water and air quality.

## **Cleantech trends**

Let's go through the cleantech trends that continue to gather momentum and remain relevant in the foreseeable future. First is renewable energy. The solar power industry leads the list among others, but the competitive cost-cutting of the new renewable energy resources makes this market expand. While offshore wind, geothermal, and wave energy power industries augment their potential, startups using, as an example, quantum-enhanced nuclear fusion are launched. Later, this energy is used in electric vehicles (EVs), which is the second growing trend. It is a preferable way to abate emissions, supported by many governments. The mobility services sector (car sharing, leasing, subscriptions) also increases the presence of EVs, which forms good habits. The Internet of Things (IoT) and Artificial Intelligence (AI) built into the transport network create smart city systems linked to each other in real time. And this is the third trend—sustainable infrastructure. Smart lighting, resource and traffic management organize our life to promote greener consumption and a more sustainable future.

## **Cleantech bespoke development**

As the situation keeps worsening, people should tackle this threatening question and lead the way to a sustainable, low-waisted world. Cleantech benefits from technological progress and upgrades its efficiency. AI, IoT and ML are the boosters on this path. Therefore lots of tech startups have appeared recently. In order to develop your own path in Cleantech, we recommend starting with a discovery phase.

In Magora, we understand that good quality software enables us to cut our energy consumption and carbon emissions. Judicious use of IT solutions can reduce CO2 emissions 10 times more than the IT sector produces. In order to maximize energy efficiency, we plan the app or web creation very thoroughly. With the aim of reducing your company's ecological footprint, Magora is able to develop an app to indicate emissions and waste along the entire production route with further AI analysis. The reduction of waste also reduces expenses; kind of win-win solution, isn't it?