Solar Transparencies

INVESTMENT OPPORTUNITY

1. **Semitransparent colored energy glass for greenhouses in hot and desert areas, glass facades for buildings, sound barrier walls and rooftops of electrical vehicles.**
2. **This PV technology, Energy Glass, is semi-transparent, insulates, has the lowest CO_2 footprint, the shortest energy payback time, no rare earth elements applied. The energy glass is easy to recycle with existing processes and channels.**
3. **Improving crop growth by reducing heat passively, improving light conditions and generating PV energy below grid parity for the greenhouse operation. It is a sustainable solution to reduce the food import dependency of regions characterized by sand landscapes. Finally, photobioreactors equipped with our energy glass are a future highly profitable market in the domains of food, cosmetics, and medicine as our energy glasses increase production by many folds.**
4. **Due to the energy glass transparency, design, and colors, the aesthetic appearance is highly appealing to architects in BIPV. It delivers energy at socket levels below grid parity beside being semi-transparent and ideal for glass facades of high-rise buildings, a multi-billion market.**

Solar Transparencies is an undertaking of significant geostrategic importance to solve the dependence of countries with high-rate food import in sand landscape areas and to meet the objectives outlined in the 2020 new EU regulations for energy self-sufficiency ratios of newly constructed buildings where glass facades are a clear trend and represent a very large market worldwide.

Our plan envisions in a first step the production of semitransparent colored energy glass (panels) with a unique combination of 3 functions optimal for greenhouses. Additionally, their potential for various other applications renders them highly intriguing. Energy generation will be at costs below grid parity. Heat reduction through inbuilt passive insulation and selective light modification to improve plant growth and nutritional value are the 3 functions the energy glass (panel) delivers simultaneously. The energy glass is installed in the same manner to that of double insulation glass on the roofs and walls of the greenhouse or within the existing window frames of glass facades of high-rise buildings. The installation process does not necessitate any supplementary costly structure.

Over the past 20 years, 17 non-exclusive licenses were given by EPFL, the owner of the technology. Entrepreneurs together with scientists have invested several hundred million USD trying to achieve the product that only Asef Azam & Stefan A. Müller finally succeeded in developing and executed an industrial manufacturing.

Asef Azam is an electrical engineer from EPFL, most probably the only engineer in DSC technology with industrial manufacturing experience. Stefan A. Müller, MBA, a CEO and Board member of various companies, both SMEs and stock listed, operating in the industrial and finance industry. With all their 25-year-long experience in various DSC projects and companies supported by practical and scientific research conducted in the field of greenhouse technology since 2018, they have introduced a significant enhanced and highly efficient DSC energy glass. Gaialogics consults companies active in DSC and perovskite as well as in building manufacturing equipment for special processes, this technology needs. We manufacture DSC prototypes, TiO_2 and consult on the supply chain of raw materials for this technology.

Three years is necessary from a Greenfield to a mass production centre and in achieving a positive EBITDA for production capacities starting at 250'000 m^2/year and increasing up to 1.5 million m^2/y with a further potential of capacity increase.

The initial investment is of EUR 55 million includes capex, ramp-up costs, technology and working capital (inventories, receivables, reserves. The company reaches in year 3 a slightly positive EBITDA and in year 6, 30% with sales of EUR 130 million. In the same time frame, the sales price is reduced from 290 EUR/m^2 to 140 EUR/m^2. After this initial investment production capacity can be increased incrementally as sales evolve and reach 500 million EUR. We are planning with our partner Gree-gree Kft to realize the investment in Hungary.

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