

EXECUTIVE SUMMARY



Global Services & Solutions (GSS) is an environmental solutions and renewable energy organization with a strong vision for better, socially responsible, safe, and cost effective solutions. GSS intends to carry out R&D work on a number of projects ranging from solid waste management to renewable energy and auto engine efficiency. Presently GSS is working on a renewable energy project that will produce integrated systems of renewable energy that will cater the energy needs of all kind of buildings and industry.

The fossil reserves of energy are depleting fast. Coupled with the growing awareness of the associated environmental concerns, the pursuit of alternative renewable energy solutions is gaining momentum. Unfortunately, most of the solutions (at least 50%) in the renewable energy field are extravagant and a waste of money. Their survival heavily depends on governmental subsidies and, to some extent, on private organizations. So much so, that in some cases more than 50% of the cost is met through different kinds of subsidies. Now the question arises that if we want a meaningful transition to non-fossil based energy use, how far can we go and how long can the government continue to subsidize this transition? We definitely need to concentrate on the cost management of renewable energy solutions to make them economically viable and competitive. That is what GSS is working hard to achieve and eager to make a humble contribution to this end. GSS Gesowintegration System Technology® (GSS, GST or simply GST) is a comprehensive system of renewable energy management. The system technology integrates four major sources of renewable energy, viz. geothermal, solar, wind, and carbon based renewable fuels preferably derived from wastes, in a cost effective way to achieve a high energy efficiency of renewable resources. Integration strategies of the system technology minimize energy losses, enhancing the overall efficiency of the system. Similarly, it solves the availability and storage problems of renewable energy, especially solar and wind, while reducing dependence on storage batteries. GSS Gesowintegration® system technology is scalable and therefore can be tailored for the needs of any level of energy consumer—domestic, commercial, industrial including construction and agricultural industry, and even utility level power generation. It can make a significant contribution to a meaningful transition to non-fossil based energy use.

GSS is a technology development company and does not intend to involve in the manufacturing and marketing of the developed technology. GSS would prefer to license technology to established manufacturing companies at very low royalties (1% or less). Alternatively, GSS may collaborate with manufacturers to produce components of the system in partnership. GSS will stand behind its system technology and would take full responsibility for trouble free, safe, and dependable functioning, with a full money back warranty. The distribution system would be elaborate, involving extensive training, but still cost effective by eliminating the middleman. Similarly all the components of the system will be produced in the United States. At this point GSS does not have a definite estimate of the cost of the GSS integrated system. However we, at GSS, are optimistic to bring down the cost of renewable energy use to almost half of the conventional fossil based energy. Grossly speaking, the cost of the smallest system (to a buyer) can be broken up as following.

Hardware cost (about a dozen mechanical components, etc)	\$14,000 to 18,000
Electronics and software cost	\$2,000 to 4,000
Installation cost along with maintenance (by trained contractors)	\$8,000 to 10,000

It would not be like buying a hybrid car, where you pay upfront what you expect to save in the life of the car. If you finance the hybrid car through a bank, you would definitely end up paying more than you would for a regular car. Payback time would be about 10 - 15 years for GSS small systems and may be less than 5 years for big systems. GSS intends to finance the integrated energy systems for customers through commercial banks on reasonable markups, sharing responsibility along with the contractors, though the main responsibility would lie with the customers. Presently, GSS needs \$300,000 (three hundred thousand dollars) for capital goods to complete R&D work (prototyping and trials). Most components of the integrated system have a patent pending status. Regarding competitive advantage, GSS would certainly have a technological edge in the market. Our competitive edge can be summarized in a single sentence as better, safer, dependable, and cost effective renewable energy solutions in the market.