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Transition to a global energy abundance and sustainability plan 2050

The future of the planet is looking brighter than ever. A 35 year plan is now being developed that, when implemented, will stabilize the atmosphere of our world. This plan is being driven by technology and financing. The three major energy technologies that will drive this plan have already been developed. They are in testing or in the first stages of commercialization. Since our world cannot get off fossil fuels for at least 50 years without dire consequences, the first technology will be a bridging technology to mitigate the carbon release from the use of fossil fuels. The technology type of carbon conversion which uses a non-thermal plasma, has emerged as a front runner for mitigating the release of carbon from the burning of fossil fuels. The bridging technology phase will then quickly be followed by technology that will stabilize wind and solar systems. We have made tremendous advances in utility-scale energy storage systems. These technologies will allow large wind and solar fields to function like large-scale base load and dispatchable energy generation stations. Those innovations are likely to be commercialized in 15 to 20 years. The last stage of this path to global sustainability involves the commercialization of such technologies as hydrogen and wave energy. Both of these nascent technologies today will play a prominent role in the energy mix globally in the future. This session will explain each of these technologies and how they fit into the overall plan with the mortar of massive, global financing.

Biography

Michael Garvin is the former Technology Transfer Specialist for the University of Iowa. He designed entrepreneurial studies courses in that position. He has developed seven start-up companies in the State of Iowa, Wisconsin and Texas. He has spent the last 20 years helping to effect changes in complex systems in the economy. In the 1990s, while working with the University of Wisconsin (Madison) and later at the University of Iowa, he helped research, design and introduce technical developments to the medical industry that resulted in an overhaul of safety practices and safety equipment used in hospitals and medical facilities nationwide. He has directed a number of research projects around electric transportation and fuel cells at Iowa State University and continues to direct technology and financial analysis projects for the energy sector with student groups at the University of Iowa.

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