FOREWORD FOR THE ENERGY IMPERATIVE

By Bianca Jagger

Two revolutions have shaped the course of recent human history: the industrial and the information technology revolution. Hermann Scheer was a driving force behind the third significant revolution, renewable energy revolution, which will determine the shape of our future. While Hermann was writing this book, he told me that this would be his definitive work, which I believe it is. He was full of enthusiasm when he finished it, exhilarated. He felt that he had succeeded in writing a book which would provide significant solutions to the challenges we face in the world today.

I was fortunate enough to know Hermann as both a friend and colleague, and to have the privilege of working closely with him over the years. In 2007 I founded the Bianca Jagger Human Rights Foundation. Hermann served on the Board of Advisors. His insight was invaluable, his expertise and generosity unparalleled. He was a guiding light, and is greatly missed. I share Hermann's belief that climate change is not just an environmental issue: it touches every part of our lives: peace, security, human rights, poverty, hunger, health, mass migration and economics. It is a global issue, and it calls for global action. As Hermann says in *The Solar Manifesto*,

To be able to discuss energy as a separate matter is an intellectual illusion. The CO2 emissions are not the only problem of fossil energy. The radioactive contamination is not the only problem of atomic power. Many other dangers are caused by using atomic and fossil energies: from the polluted cities to the erosion of rural areas; from water pollution to desertification; from mass migration to overcrowded settlements and the declining security of individuals and states. Because the present energy system lies at the root of these problems, renewables are the solution to these problems.

When speaking about climate change and renewable energy, I often reference Hermann's work, in particular his excellent books, *The Solar Economy* and *The Solar Manifesto*, in which he says that the transition to renewable energy is the over-riding moral imperative of our time. He states that renewable energy costs will generally go down, as they largely consist of technology expenses. Mass production and technological innovation will bring dramatic decreases in cost. He was emphatic that we should see the promotion of renewables not as a burden, but as a unique economic opportunity. Thanks to Hermann, exemplary progress has been made worldwide towards a green electricity supply from renewable sources rather than coal, gas and nuclear power.

Hermann was a pioneer. His leadership in the field of renewable energy, his passionate commitment to the environment and to human rights was a constant inspiration. TIME magazine called him a 'hero for the green century' and cited his 'radical vision' and

'gale-force enthusiasm,' which 'electrified Washington audiences.' These are well deserved accolades for a man who devoted his life to making a difference in the world. His many significant accomplishments speak for themselves. He introduced feed-in tariffs, otherwise known as Scheer's law, during his time as member of the German Parliament. Although feed-in tariffs had previously existed, on a smaller scale, in Denmark, what Hermann achieved in Germany is unique. His implementation was rigorous in ensuring that the price paid for renewable energy gave the producer an adequate return, which meant that it was a worthwhile investment. Thanks to Hermann's vision and hard work, feed-in tariffs have become a landmark piece of legislation, incentivising the use of renewable energy all over the world. I

Hermann's stance was bold, and uncompromising. Other environmental experts continued to advocate a partial conversion to renewable energy, claiming that electricity systems must continue to rely in part on coal, nuclear and fossil fuels. Hermann was adamant that we should aim for a 100% conversion to renewables. His conviction that this was not only possible but necessary has been borne out by the growth and success of the sector in recent years. Hermann knew that renewable energies can stimulate technological innovation and economic development, and that renewable energy will become fully competitive with conventional energy systems. Onshore wind power has already achieved parity with coal fired power, while being much less environmentally damaging. Hermann understood the crucial economic and social benefits renewable energies could have for the poorest countries in the world. Home-grown renewable sources can help developing countries to fuel their economic development and to insulate themselves against rising world energy prices.

The governing principles behind Hermann's approach were the democratisation and decentralisation of energy. Energy autonomy, for countries and even for individuals, was his fundamental goal. He believed that, by producing as much energy as possible locally, we could reduce global dependence on long distance transmission lines, and diffuse the concentration of economic power, which resides largely with a very few companies and institutions. Hermann was an anti-monopolist. He knew, too, that renewable energy doesn't necessarily, automatically lead to democratisation. His principles were rigorous, his warnings against projects such as the proposed DESERTEC supergrid, intended to facilitate electricity transfer from North Africa to Europe, were clear.

'The countries in which these installations are located do not gain adequately from them,' He wrote to me in an email of the 6th of July, 2009. 'They need decentralised energy production and supply even more badly than we do because their grid infrastructure is less developed than ours. The example of oil companies in the oil exporting countries are a warning. Those mega-investments hardly ever reach local populations - instead they often reinforce local disparities.'

Hermann was an innovator, a passionate advocate of renewable energy before it was recognised, or taken seriously. As his obituary in the Guardian notes, he was 'a tireless campaigner for the promotion of renewable energies, in particular solar power, a cause he championed long before it was fashionable to do so... He never withered under the criticism that his ideas were utopian.'ⁱⁱⁱ As Stefan Gsaenger, secretary general of the World Wind Energy Association, said, 'He was one of the first who understood the potential of renewable energies and developed practical and political strategies for their implementation. The great recent success of renewables around the world would have been impossible without him."^{iv} As time goes on and the impending global energy crisis looms ever larger, Hermann's vision seems prophetic.

Hermann's commitment to renewable energy was unwavering; he was head of the European Association for Renewable Energy EUROSOLAR, and Chairman of the World Council for Renewable Energy, WCRE, two non-profit international organisations, and in 1999 he was awarded the Right Livelihood Award, otherwise known as the alternative Nobel Prize. He was the driving force behind the establishment of the International Renewable Energy Association, IRENA. He realised that promoting renewables must become a global and universal priority, and that the creation of IRENA was a necessary condition for that goal. Together with EUROSOLAR and the WCRE, Hermann struggled for two decades to make IRENA a reality. It exists today because of his powers of persuasion, his consuming passion and his hard work. He knew that there could be no global renewable energy revolution without IRENA. As Hermann said in his speech at the founding conference on January 26th, 2009, 'Rapid action is indispensable. The time for paying lip service to renewable energies is over. An end to the game of "talking globally, postponing nationally" is well overdue.'

Hermann Scheer has been called the 'solar king,' the 'sun god,' 'solar crusader,' and the 'solar pope;' he was all those things and more. Hermann was a visionary, who set us on the path towards a world without fossil fuels, coal and nuclear power. He paved the way for 'a new generation of decision makers... in the established energy sector that recognizes that nuclear energy and fossil-fuel energy lead to a dead end.' Hermann was a force for change, a voice of reason in a sector dominated by big business, lobbyists and spin doctors. His work has helped to shape the way we perceive and implement renewable energy. As the TIME Magazine article goes on to say, 'Members of the German parliament don't usually create much of a stir outside Europe. But Hermann Scheer... has, more than any single political leader, transformed Europe's energy landscape.'

Herman Scheer's passing is a great loss. I have many fond memories of his joie de vivre, his great vigour, and his infectious sense of humour. He was uncompromising when it came to his principles, a staunch and loyal friend, a courageous campaigner, and a man of unshakeable integrity. He has left an enduring legacy behind and is greatly missed.

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