





the public benefit, but the message that arrives to them must be clear and positive. In this sense, the recent papal encyclical on climate has been an excellent example of this positive approach that calls people to remember their responsibilities as human beings and inhabitants of planet earth.

Supposing that we can pass the message involved in the “Sower’s way”, the benefits for the earth’s climate could be tangible. Implementing this strategy may not need formal measures; we can see it as a form wisdom that already exists in people’s minds and that leads individuals and groups to supporting investments in renewable energy and in the correlated efficiency measures. Note that the Sower’s way doesn’t take fossil fuel interests as antagonists, but as potential allies. After all, energy production is the job of energy companies and the idea is that it is for their own benefit to invest in moving away from their current dependency on fossil fuels to a system based on renewable resources. The diffusion of this concept could also result in practical measures to ease permits and reduce bureaucracy for investments in sustainability.

Perhaps most importantly, the Sower’s way is a *quantitative* approach to the transition, based on physical factors and not on the vagaries of the markets. As such, it can be presented to the public and to decision makers as a rational complementary guide for setting up policies not relying on belief in the possibility of infinite, unconstrained growth, or based on the often emotional and ideological approaches to the concept. Markets do have a fundamental role to play in the transition, but their capability of efficiently allocating resources for short term resources does not guarantee that the energy transition will be fast enough for the targets of avoiding the disruption of the ecosystem that is resulting from climate change.

In itself, the sower’s strategy, formally or informally implemented, does not guarantee a smooth transition to a sustainable (and cool enough) world. It can’t go against the laws of physics and it can’t allow humankind to continue growing forever. Adapting our economy to renewable energy [10] requires new infrastructure, rethinking industrial processes and agricultural practice, adapting to the gradual reduction in the availability of all mineral resources. Among other things, we need to learn how to use renewable energy to power agriculture [11], to replace rare minerals with common ones (e.g. copper with aluminum), to manage waste as a resource and not as a burden, and much more. All this is possible, but not easy and it has a cost. In order to have a future, we need to make sacrifices. This is something that was clear to our ancestors and can be understood also by us, their descendants.

#### 4. CONCLUSIONS

Building up a completely sustainable “circular” economy is a difficult task, but not an impossible one. The only impossible thing is to keep civilization alive without the availability of cheap energy and resources. The sower’s strategy may give us a chance for guiding our policies for a society based on renewable energy, a step toward a completely circular society. No matter how implemented, the sower’s strategy implies that we need to invest sufficient resources in the short term in order to create a new energy system before the depletion of fossil carbon or the negative effects of global warming makes it impossible to do so, but

not so much that it would be an excessive burden on people’s welfare. It is a window of opportunity that will not be there forever, but which still exists today. If we are willing to invest in the future, we can still have a future.

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