What is the most burning and urgent single energy challenge in today’s world and how do you think governments and businesses should effectively address them?

Constructively Fighting Off the Limitations in Energy

by Lebriz Kiziler

The central issue that the energy industry faces in modern times is the lack of sustainability of the current leading energy mechanisms, which are the fossil fuels. Most of the energy used in transportation, industry and infrastructure is sourced from fossil fuels such as coal and natural gas; and the need for energy in every field is ever increasing. Ranging in their eco-friendliness, these fossil fuels all share one thing in common, and that is the fact that they are not renewable and are being used up in an alarmingly high speed.

Utilization of fossil fuels has been a method of energy production ever since the earliest times of humanity and the importance and weight of these have remained at peek for the majority of human existence. Even today most of energy production for industry uses fossil fuels, and the main means of energy production for transportation of all kinds is also through these non-renewable resources. With the speed of progress in these fields there is more need for energy than ever, and the resources having a limit creates a dilemma of some sorts: should humanity limit their progress now or their existence in the long run? The third solution, and the only realistic one both long and short term appears to be creating a balanced atmosphere of change for these energy productions methods to renewable and sustainable ones, and ensure that there are no limitations to either of these.

The dependency of the existing industry on these makes the alternative choices of energy difficult to take on. The current infrastructure is built heavily on production facilities that utilize these resources, and industrial systems are difficult to adapt to new resources or methodologies. If we take coal, for example, the way energy is produced with coal is through heat, which means only heat producing alternatives could use the existing coal facilities. Even then these facilities would require adaptations and time for these changes to occur, ending up causing a huge initial loss to entrepreneurs that attempt these changes. These kinds of difficulties discourage industry
leaders to take initiatives in terms of switching resources and resulting in the lack of improvement regarding the resource quantities for fossil fuels.

As the energy industry is vital to the rest of all industries it is difficult to subject it to a major change without risking a worldwide economic situation. Whilst the reality of this affects only companies directly, as the regulators of the overall infrastructure governments also have a place in the process of improvement for the fossil fuel use. As companies struggle to supply to the new needs the governments need to ensure that the regulations and infrastructure for the non-fossil energy choices are constructed healthily and encourage the industrial development of these alternatives. This could be done constructively and in reverse of what happens in our days; governments could lower taxing of non-fossil energy production methods to encourage and assist the change towards them, unlike the way it is done now by taxing fossil fuels extra for discouragement. This would also benefit the companies and governments ultimately as it would encourage a rapid growth of these alternative energy production methods without risking losses from overly taxed fossil fuels. Following this phase and after the desired growth for non-fossil energy industry is reached, governments could then use harsher limitations for the fossil fuels to limit their share in the overall production scheme. This kind of mild and encouraging change process would make it possible for fossil fuel use to be reduced without risking the industrial needs and big money losses. Altogether this would be a change of models that is realistic yet not too drastic a change, which would also be beneficial in terms of adapting the behavioral aspect of it to people. If this model is successfully established in the industry governments could also adapt it to their citizens through creating a parallel system of the same idea for non-industrial uses of energy by people. As well as the previous one, reducing taxes for non-fossil energy uses in daily lives of the citizens and transportation would encourage a switch towards these choices for the rest of the population and not just companies.

Additionally governments need to prepare working infrastructures for the new energy options to make sure this change process does not result in limitations and shortages. Upgrading residential systems to support non-fossil energy use as well as creating the fitting infrastructures for the energy to be transported through would provide the governments economically in the long run; as it would cost to make these changes the steps afterwards would have much less losses due to this strong base and it would ensure the adaptability of this plan for the future.
Benefiting from such government encouragements, companies would need to actually utilize the change process themselves as well. Within the industry, the changes would depend on the population’s preferences and views adapting first. This customer-lead changes could be easily adapted to if the companies also contribute in the education of the public about the necessity of such change. For instance; car companies could conduct events to promote their new, futuristic non-fuel powered vehicles and educate the public about the reasons for such changes. This kind of direct involvement of the companies and therefore their collaboration with every other counterpart in the process of change would benefit the companies immensely; since their connection to customers, reputations and therefore their profits would increase via the use of new energies which they promote. If such strategy is adapted by several leading companies it would be another reason for governments to create even more fitting regulations of these industries, making non-fuel not just preferable but the only reasonable choice through these new support mechanisms.

Any change process requires the extra steps by all sides involved; and in such an inevitable change in horizon for the mainly fuel powered civilization we have, cooperation and support of both governments and companies would make the process much less painful and economically disadvantageous. With new infrastructures, systems and encouraging tax regulations governments could pioneer this change that companies could progress through taking control of the inevitability of it and turning it around for their own benefit. Both of these actions would result in a more educated, aware and reasonable public and result in a healthy timeline of improving the imbalanced and malevolent use of natural resources, ultimately solving the problem in the benefit of every party involved and providing a better future for our planet.