



What if everyone had access to low-cost, renewable energy?

Human progress has always involved gathering more and more energy, and getting it at cheaper prices.

We are at a point where we rely on energy. But we're still not able to use it cost-efficiently, in a renewable way or without waste that harms the environment. If we could address all three issues with one solution, that would be a fantastic thing.

It wouldn't be without its challenges

A move to a low-cost renewable energy source would throw up new challenges. It wouldn't solve all the problems – in many cases it would simply shift an existing challenge elsewhere. For instance, if everybody had access to low-cost energy consuming cars, who wouldn't want to drive a car? But where would we find the space for those cars? The existing roads would not be feasible – there might need to be more regulation or taxes for the utilisation of the roads to balance out and make it more attractive for people to use public transportation. We would need better infrastructures.

Alternatively we might have to think about innovative ways of public transportation. We could see something as futuristic as driverless, individual pods, which transport people from one destination to another, like individual buses.

That's just one example in one specific industry and challenges would appear across all industries. There's also going to be a need to deal with wastage from energy production as more energy is produced; what would we do with it? How would we minimise it?

If there is plentiful energy at cheap prices, lifestyle choices are going to change. People may not even want to walk half a mile a day, so how would we deal with those lifestyle choices? The kinds of challenges and bottlenecks that are faced would be different but they're not going away.

It could change the political landscape of the globe

It would create a huge shift in the political balance. Major oil producing countries would see their influence decline, while the biggest beneficiaries would be the huge consumers of energy, including the US, India and China.



India and China are almost better placed than the US to take advantage of such low-cost renewable energies, because some of their biggest challenges today for growth stem from the current lack of this. The US has already grown using available energy sources, but if there is low-cost renewable energy, a huge lid would be lifted on the growth of other economies.

There would also be countries that would benefit just because of their location or the natural resources they have been endowed with.

It could act as a global levelling ground

It could spread the wealth more evenly throughout countries. Part of the way it could do this would be through making the movement of people across nations a lot easier. The internet has provided fantastic opportunities for emerging market countries to provide services for more developed economies, but the impact would increase if we were able to not only communicate across countries, but migrate easily and at a low cost. In that sense it would help more people across the globe work with each other, making the world a smaller place.

Some of the biggest winners could also be the biggest losers

One of the ironic things is that some of the biggest gainers could also be the biggest losers. For the really poor people who are struggling to get to work, walking miles for basics like water and education, the benefits of low-cost modes of transportation are obvious. But because poorer sections of society tend to be focused on manual labour, the same low-cost energy would also create a drive towards replacing manual labour with machines. These people could benefit a lot in one way, but they could also be affected hugely by scarce job opportunities.

The same trend could be reflected elsewhere. In terms of the transportation industry, driverless vehicles would mean little need for cab or truck drivers. There's a huge transition cost associated with re-training a large number of people, and we don't know what we'd be re-training them for. The jobs wouldn't initially be available, because while the technology was shifting we wouldn't know what our new sectors would be or what jobs would exist.

In conclusion

A world where everyone had access to renewable, low-cost energy would be different in almost every way to the one we know now. From global politics to entire employment sectors, much would be uncertain. But one thing is clear – the industries which are able to negotiate changing infrastructures to meet the changes will be the big winners.

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