

THE SECOND INDUSTRIAL REVOLUTION A SUMMARY

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Saving the earth from destruction calls for at least three things. These include: curbing population growth, creating a change in the production structure of developing countries and, initiating a change in the production structure of industrialised countries, as well.

There are three possible options for altering the production structure of industrial countries. First, the return of production and consumption to a pre-industrial level. Second, gradual and phased changes toward a more environmentally-compatible production model and third, a production revolution based on centralised decisions.

Of these options, the first is politically and psychologically impossible, while the second is too slow and ineffectual. The best option for industrialised countries is the third option, that is, to agree on radical changes through an international protocol to be achieved during the next few decades. The protocol should simultaneously affect energy production, goods production, land use and construction, and traffic.

- Special areas to be set aside for energy production. These should be established on a three-tier system, in which, wind power, solar radiation and geothermal heat can be utilised. Several hundred factories producing solar panels and wind power plant components should be built at the same time.
- Goods production to be wholly based on recycling. Utilising at least two recycling systems, a product-oriented recycling system and a materials-oriented one. For example, metals and carbon compounds should each have their own recycling system.
- Establishment of an integrated nature conservation area grid to become the most important element of land use. In addition, eco-villages should be built, old villages restored and the infrastructure of larger towns and cities revised, in order to make them more environmentally-friendly. For instance, research ought to be carried out on a closed water circulation system and the composting of organic waste on a wide scale.
- Traffic to be made non-polluting. Railways should be developed and a 4-track railway network should be constructed throughout Europe. An efficient road traffic system should be connected to the railways. A system of rentable, horizontally moving lifts ought to be developed. Data communications must improve, in order to reduce the need for physical communications.

The entire process should go through the following stages:

- international political decisions on the most fundamental objectives
- extensive planning competitions to solve problems affecting different sectors
- changes in legislation and, in particular, taxation, over the entire continent
- preparation of detailed plans, inviting competitive tenders
- implementation, to which a commitment is made at the outset, extending over several decades

Present production processes do not pay sufficient attention to environmental issues and a radical change is needed for the result to be satisfactory. Making small changes only reinforces the current situation. A radical change calls for a long-term strategy and centralised, international decisions.

Since 1987, **Dr. Eero Paloheimo** has been a member of Parliament with the Green Party, in the constituency of Uusimaa Province, Finland. He received a Ph.D. in engineering in 1979 and, since 1984, has been a designer at Paloheimo and Ollila (Engineering). Member of the Committee for the Economy, which is concerned with environmental problems, as well as Chairman of the Committee for the Future, Dr. Paloheimo is also the author of five books.

