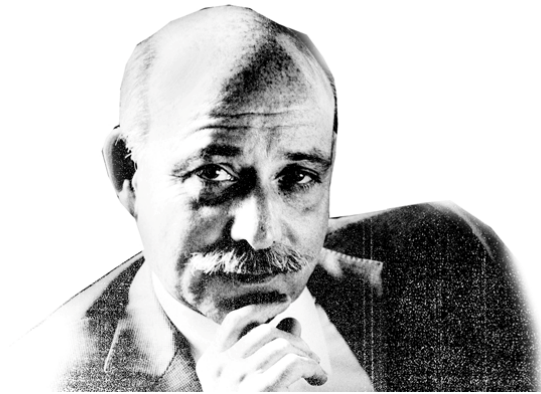


## Jeremy Rifkin: Energy-sharing is the new internet



The Second Industrial Revolution, powered by oil and other fossil fuels, is spiralling into a dangerous endgame: prices are climbing, unemployment remains high, debt is soaring and the recovery is slowing. Worse, climate change from fossil-fuel-based industrial activity looms. Facing a collapse of the global economy, humanity is desperate for a new vision to take us into the future.

History's great economic revolutions occur when new communication technologies converge with new energy systems. Energy revolutions make possible more expansive and integrated trade. Accompanying communication revolutions manage the new complex commercial activities. In the 18th and 19th centuries, cheap print technology and the introduction of state schools gave rise to a print-literate workforce with the skills to manage the increased commercial activity made possible by coal and steam power, ushering in the First [Industrial Revolution](#). In the 20th century, centralised electricity communication -- the [telephone](#), radio and television -- became the medium to manage a more complex and dispersed oil, auto and suburban era, and the mass consumer culture of the Second Industrial Revolution.

Today, internet technology and renewable energies are about to merge to create a powerful infrastructure for a Third Industrial Revolution (TIR). In the coming era, hundreds of millions of people will produce their own [green](#) energy and share it in an "energy internet", just as we now generate and share information online. The creation of a renewable energy regime, loaded by buildings, partially stored in the form of hydrogen, distributed via an energy internet and connected to plug-in zero-emission transport, establishes a five-pillar infrastructure that will spawn thousands of businesses and millions of sustainable jobs. The democratisation of energy will also bring with it a reordering of human relationships, impacting the way we conduct business, govern society, educate our children and engage in civic life.

The TIR will lay the foundations for a collaborative age. Its completion will signal the end of a 200-year commercial saga characterised by industrious thinking, entrepreneurial markets and mass workforces, and the beginning of a new era marked by collaborative behaviour, social networks and boutique professional and technical workforces. In the coming half-century, conventional, centralised business operations will be increasingly subsumed by the distributed business practices of the TIR; and the traditional, hierarchical organisation of power will give way to lateral power organised nodally across society.

At first glance, lateral power seems a contradiction. Power, after all, has traditionally been organised pyramidically. Today, however, the collaborative power unleashed by internet technology and renewable energies restructures human relationships, from top to bottom to side to side, with profound consequences. The music companies didn't understand distributed power until millions of people began sharing music

online, and corporate revenues tumbled in less than a decade. [Encyclopedia Britannica](#) did not appreciate the collaborative power that made [Wikipedia](#) the leading reference source in the world. Newspapers didn't take the blogosphere seriously; now many titles are either going out of business or moving [online](#). The implications of people sharing energy are even more far-reaching.

To appreciate how economically disruptive the TIR is, consider the changes over the past 20 years. The democratisation of information and communication has altered the nature of global commerce and social relations as significantly as the print revolution. Now, imagine the impact that the democratisation of energy across all of society is likely to have when managed by internet technology.

*Jeremy Rifkin is the author of The Third Industrial Revolution: How Lateral Power Is Transforming Energy, the Economy, and the World (Palgrave Macmillan)*