

Current and post COVID-19 energy challenges in Algeria

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ABSTRACT

The world is going through a health crisis which has triggered an unprecedented economic crisis, according to economists, unprecedented and worrying in its origin, nature, course, and geographic coverage. The confinement of populations, the blocking of logistics chains, the stoppage of economic activity imposed by this COVID-19 health crisis, have highlighted the vulnerability of value chains. Nowadays, the limits of the “just in time” strategy can be observed. To remedy this, it is necessary to understand the characteristics of this economic crisis in its current context. In addition, the pandemic with its effect in prolonged waves caused a more or less severe recession depending on the country, which led to a drop in global energy demand by 6% and an 8% decrease in greenhouse gas emissions. Also, the forecasts are not optimistic for the water sector, which is no exception. Climate change models indicate that precipitation could decrease by more than 20% by 2050. The challenge for Algeria in the years to come is to adapt to a decrease in renewable water resources. The country must mobilize unconventional water resources (desalination and reuse of wastewater) which will be a strategic component in water management. In addition, the development of unconventional resources leads to an increase in electrical energy demand of 12% by year, which must count in the national energy balance. The objective of this work is to offer practical solutions to current energy challenges, defeat the post-COVID-19 energy battle, and face the future water stress that threatens our country.

Keywords: Renewable water; Unconventional water; Energy transition

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