

Energy Transitions in the Long Run: Theory and Evidence from English Coal*

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Abstract

This paper examines how transitions between energy resources affects economic activity in the long run. We develop a simple theory to show how the introduction of a new energy source affects energy supply, consumption per capita and population growth. We test key theoretical predictions by examining the effects of the first energy transition in England, when coal replaced wood as the primary energy source. Our empirical estimates suggest that the start of the wide-scale exploitation of coal reshuffled the economic landscape in England even prior to the invention of the steam engine.

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