

[An Economic Analysis of The Circular Economy \[1\]](#)

"In this paper we develop a global computable general equilibrium (CGE) model to evaluate the effects of illustrative circular economy scenarios for Denmark and the European Union using the GTAP 8 dataset. The goal of a circular economy is to minimize the use of virgin resources and the generation of residuals not re-used in production. We simulate four circularity scenarios - two Denmark specific circularity scenarios and two scenarios that affect the European Union. The modeling results show that Denmark's gross domestic product (GDP) could increase by 0.8% to 1.4% relative to the baseline by 2035. Under similar circular economy assumptions, European Union's GDP could increase by 1.4% to 2.7% by 2035 relative to the baseline. Our sectoral modeling results show that the construction sector in Denmark contributes more than half of the GDP growth. The rest of the GDP growth comes from other sectors therefore playing an important role in placing the economy on a sustainable growth path. The scenarios assume that there are no upfront economic costs and opportunity costs of achieving the efficiency improvements that define the circular economy." (p. 1)

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