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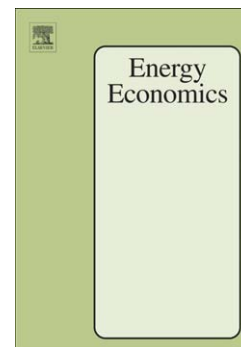
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# Characterising Green Employment: The impacts of ‘greening’ on workforce composition\*

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## Abstract

This paper estimates the share of jobs in the US that would benefit from a transition to the green economy, and presents different measures for the ease with which workers are likely to be able to move from non-green to green jobs. Using the US O\*NET database and its definition of green jobs, 19.4% of US workers are part of the green economy in a broad sense, although most green employment is ‘indirectly’ rather than ‘directly’ green, comprising existing jobs that are expected to be in high demand due to greening, but do not require significant changes in tasks, skills, or knowledge. Analysis of task content also shows that green jobs vary in ‘greenness’, with very few jobs only consisting of green tasks, suggesting that the term ‘green’ should be considered a continuum rather than a binary characteristic. While it is easier to transition to indirectly green rather than directly green jobs, greening is likely to involve transitions on a similar scale and scope of existing job transitions. Non-green jobs generally appear to differ from their green counterparts in only a few skill-specific aspects, suggesting that most re-training can happen on-the-job. Network analysis shows that the green economy offers a large potential for short-run growth if job transitions are strategically managed.

**Keywords:** skills, occupational choice, green employment, green economy

**JEL classifications:** J24; J21; O33; J62; O51

## 1 Introduction

The green growth transition (‘greening’) has been called a modern-day industrial revolution due to its expected large structural impact on labour markets worldwide (Bowen, Duffy, & Fankhauser, 2016). According to the United Nations Environment Programme, a ‘green economy’ is one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.<sup>1</sup> Policy-makers have two main goals for the green economy: managing the transition to green jobs and promoting green economic growth (Martinez-Fernandez, C., C. Hinojosa & G. Miranda,

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<sup>1</sup> See <http://www.unep.org/greeneconomy/AboutGEI/WhatIsGEI/tabid/29784/Default.aspx>.

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