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## FACTORS DRIVING FIRMS' GREEN INVESTMENTS

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# Factors driving firms' green investments<sup>1</sup>

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#### **RESEARCH AND POLICY BACKGROUND**

Boosting firms' investments in environmental protection (green investments) could speed up the transition to a climate-neutral economy and more sustainable long-term economic growth. Understanding what determines firms' decisions to invest in assets such as equipment for pollution control and cleaner technologies is important for the design of policy measures aimed at improving environmental quality and resource efficiency by incentivising firms' engagement in green investments. Existing evidence on what factors determine firms' decisions to invest in environmental protection is still limited.

To help address this evidence gap, we examined a range of factors underlying firms' investments in equipment for pollution control and in equipment linked to cleaner technologies in Ireland's industry sector. The factors included firm characteristics and external factors such as environmental regulations, competition and learning effects from other firms with green investments in the same industry and the same region. Given the variation of environmental regulations across countries, we further investigated whether the country of origin of foreign investors played a role in firms' decisions to invest in environmental protection.

#### DATA AND METHODS

This research used micro-data from Ireland's industry sector (manufacturing and utilities) from the Census of Industrial Production (CIP) Survey provided by Ireland's Central Statistics Office (CSO).<sup>2</sup> The empirical analysis was carried out in two stages. First, we identified and quantified the importance of a range of firm characteristics and external factors that influenced firms' investment in equipment for pollution control and in equipment linked to cleaner technologies. Second, we examined whether a firm's decision to invest in environmental protection was

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<sup>&</sup>lt;sup>2</sup> Results are based on the analysis of strictly controlled Research Micro-data Files provided by Ireland's Central Statistics Office (CSO). The CSO does not take any responsibility for the views expressed or the outputs generated from this research.

influenced by the investment behaviour of other firms with green investments in the same industry or in the same region.

#### RESULTS

Our results indicate that larger firms, importers, and firms with supply chain linkages were more likely to invest in equipment for pollution control and in equipment linked to cleaner technologies. Foreign-owned firms were less likely than local firms to invest in environmental protection, particularly foreign affiliates of companies with headquarters based in the US or in the Euro zone. This result might reflect the fact that these foreign affiliates had already adequate equipment for pollution control and cleaner technologies and there was no need for further investment. Our results indicate that this is indeed the case for foreign affiliates of US-based multinationals. While firms with a higher energy intensity were more likely than other firms to invest in equipment for pollution control, this was not the case in relation to their investments in equipment linked to cleaner technologies. This result could be explained by the need for energy-intensive firms to comply with regulations on pollution control to reduce greenhouse gas emissions while the effect of investing in equipment linked to cleaner technology might take longer to emerge. Within-industry competition was an important driver of firms' investment in equipment linked to cleaner technologies. Finally, our results indicate that being in the same industry and in the same region with green investors increased the propensity of firms to invest in equipment for pollution control and in equipment linked to cleaner technologies.

#### **POLICY IMPLICATIONS**

To the extent that incentivising more firms to invest in environmental protection could contribute to a faster transition to more sustainable long-term growth, our research results suggest that targeted policy measures to enable small and medium-sized firms to invest in environmental protection would be beneficial to achieving that goal. Furthermore, policy measures that facilitate learning from firms with green investments in the same industry and in the same region could also boost firms' investments in environmental protection. Whitaker Square, Sir John Rogerson's Quay, Dublin 2 Telephone **+353 1 863 2000** Email **admin@esri.ie** Web **www.esri.ie** Twitter **@ESRIDublin** 

