Does ISO 14001 certification reduce industry pollution?

Companies with environmental standard ISO 14001 certification may emit just as much air pollution as non-certified companies, according to a recent study. The results suggest companies see ISO 14001 as a way to appear environmentally responsible rather than to actively improve their environmental credentials.

ISO 14001 is a globally recognised and popular environmental standard: in 2007, 154,517 companies in 148 countries received ISO 14001 certificates. The standard was created in 1996 to help companies create their own environmental management system and performance measures to reduce their impact on the environment. It can also help companies meet regulatory requirements and save money by streamlining their processes and reducing waste. For example, it can help companies meet the environmental requirements of the EU Integrated Pollution Prevention and Control Directive (IPPC Directive).

However, ISO 14001 has been criticised for not specifying clear mechanisms or targets to encourage companies to reduce the amount of pollution they create. In addition, little work has been done to demonstrate the actual effect of ISO 14001 certification on an organisation's environmental performance.

To address this, the researchers examined the atmospheric pollution emissions from 126 Spanish companies, from a range of sectors regulated under Spain's IPPC law, listed on the Pollutant Release and Transfer Register created by the Spanish Environment Ministry. The list of companies was divided into two groups: the first contained 50 companies that had held ISO 14001 certification since 2001, and the second contained the remaining 70 companies, none of which held ISO 14001 certificates. For each company the researchers identified the amount of each atmospheric pollutant released per year from 2001 to 2007. Two statistical analyses were then used to compare the average emissions of the groups.

Both tests revealed there was no significant difference in atmospheric pollution emissions between those companies with ISO 14001 certification and those without. In effect, ISO 14001 allows companies to appear to be taking their environmental responsibilities seriously without requiring significant changes to the way they operate. This suggests the standard is used by companies because of external pressure to do so, either from customers and other stakeholders, or because of legislative requirements. Companies may not recognise the additional benefits of good environmental management, such as reduced costs.

However, the researchers caution that the sample they studied only includes those industries that are covered by Spain's IPPC Law and included on the Pollutant Release and Transfer Register. They also recommend further work to establish whether the measure of atmospheric pollutants they used is adequate to assess the effect of ISO 14001 certification.


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