



## Technology's role in the ESG adaptation

Ambitious environmental, social, and governance (ESG) goals are now part of nearly every company's agenda, from protecting biodiversity and reducing climate impact to reaching workforce gender parity and ensuring transparent financial reporting. To meet ESG targets, companies must adapt. By using digital technologies, companies can – together with their business partners – develop solutions that help them overcome ESG challenges.

Companies can utilize technology to meet their sustainability goals through two main approaches. The first approach involves enhancing senior management's ability to address ESG challenges effectively. This means improving their expertise in regulations to accurately evaluate the impact of ESG factors in their organization, as well as understanding how the company's activities affect the environment. Consequently, companies must also expand their digital capabilities. The second approach requires increased collaboration. As ESG knowledge varies across internal departments and external partners, companies must demonstrate the importance of synergy between them. It's also important to note that digital-enabled ESG solutions such as digital platforms require an explorative approach as business knowledge, legislation and digital technologies need to be integrated. It may be necessary to adopt a collaborative approach where various stakeholders work together to share knowledge and experience, thereby developing new, digitally enabled solutions. Now, let's dive into a couple of examples in which digital solutions may enable ESG adaptation.

A current challenge is finding effective methods to capture and store greenhouse gases (GHGs), such as carbon dioxide, methane, ozone, and nitrous oxide, and developing innovative solutions for their long-term storage. Digital technologies like IoT sensors may play a useful role in measuring underground GHS emissions storage. Digital technologies could even enable experts to determine the most optimal temperature for storing emissions and tracking their subsidence impact. In another example, regional Dutch water authorities can offer valuable insights to both government and private organizations regarding potential environmental risks associated with biodiversity initiatives. For instance, they can help ensure that efforts to redirect water to arid areas for biodiversity enhancement do not inadvertently damage residential properties. These predictions and data management driven scenarios can provide relevant insights into restoring biodiversity.

Companies can therefore highlight the adaptability of digital innovation in meeting ESG commitments, particularly emphasizing the crucial role of effective data management. A relevant article about this topic was published in 2022 and provides more in-depth insights (see: Mastering the ESG reporting and data challenges).

Enjoy the read!



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