

A guide to sustainable IT

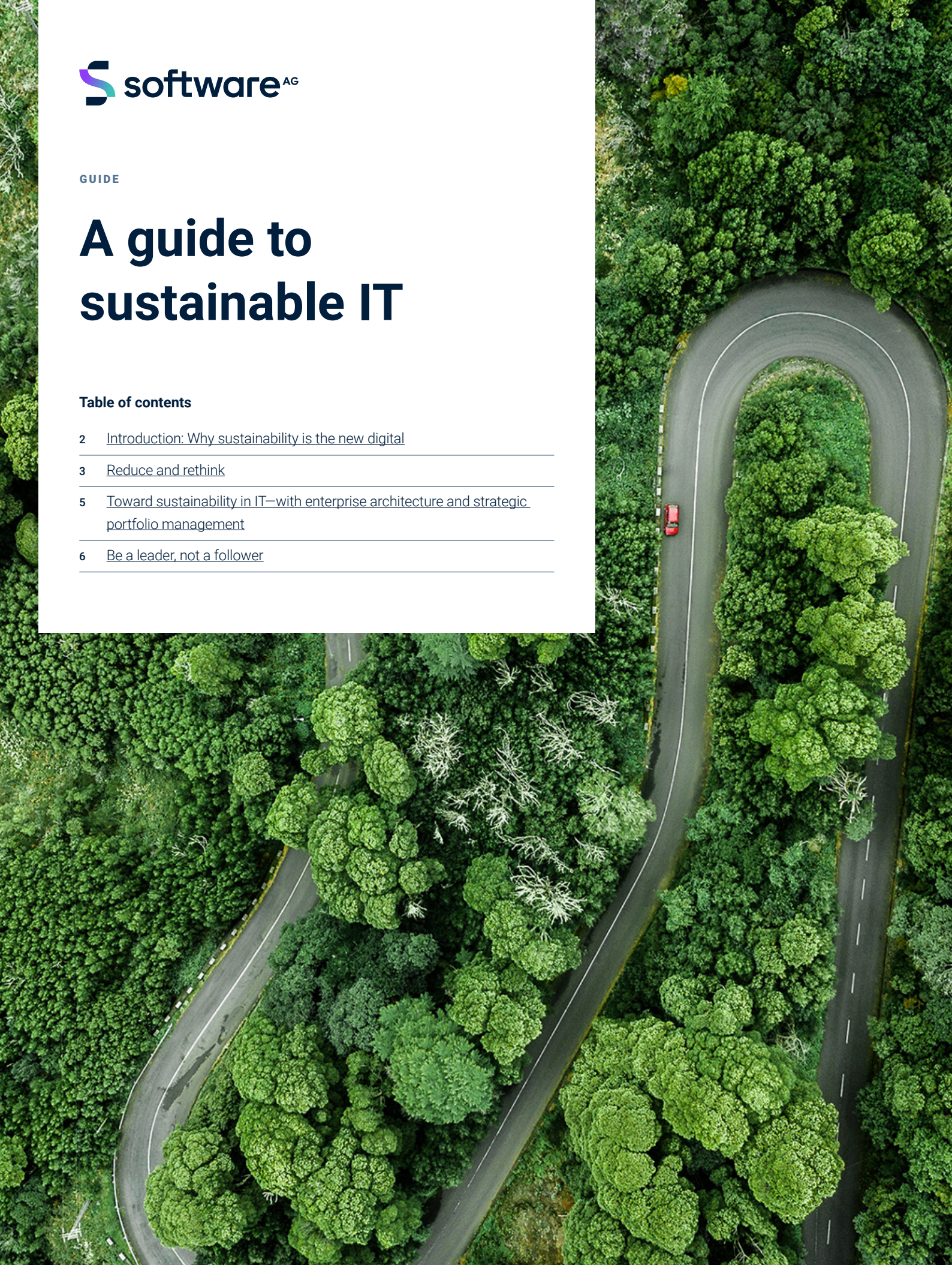
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Sustainable IT—also called “Green IT”—collectively describes the initiatives IT undertakes to support the broader organization in achieving its ESG goals. As two sides of the same coin—IT being a key part of the solution as well as a key part of the problem—IT plays a huge role in an enterprise’s ESG efforts. It must drive the digital transformation of the business’ operating and business models, execute introspection of its own operations, and must enable compliance with legislation and regulations. Enterprise architecture management (EAM) and strategic portfolio management (SPM) are essential disciplines here. This guide aims to demonstrate why and how they can support IT’s ESG goals.

Introduction: Why sustainability is the new digital

Not long ago, the great disruptor of the business world was *digital*. The rise of the internet, the accelerating power of computing, and the possibilities offered by big data demanded firms adapt with urgency. Across industries from media to health care to finance, online start-ups shook incumbents. Established firms reshaped their organizations and their products to meet the demands and opportunities of a digital economy—or they risked becoming obsolete.

Today, a similar disruption is afoot, but there’s a new sheriff in town: [sustainability](#). The fight to prevent climate catastrophe means that enterprises across the globe are continuously navigating new policies, standards, laws, and regulations that are driving them to change their ways of doing business. Reputation, and therefore bottom line, increasingly hinges on pledges to minimize carbon emissions, progress toward the United Nations’ 17 Sustainable Development Goals (SDGs) or commitments to investing using Environmental, Social, and Governance (ESG) principles. Across industries and continents, corporate leaders are embracing the need to transform a global economy founded on an idea of unlimited access to resources to one that recognizes the limits and consequences of everything we extract, manufacture, and consume.

What does sustainability mean for my business?

Embracing sustainability is not only about saving the planet: just like digital before it, the sustainability disruption is driving innovation, spawning new technologies and business models, and opening up multibillion dollar industries. From renewable energy, to electric cars, to investment funds based on ESG credentials, being “green” is increasingly synonymous with big business. Across all industries, firms that fail to act on sustainability are putting profits in peril: according to [Capgemini](#), 79% of consumers are changing their preferences based on sustainability. [46% of employees](#) would only work for a company with sustainable practices.



79%
of consumers are
changing preferences
based on sustainability

Source: Capgemini



46%
of employees would only
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Source: HP



18%
of large organizations have a
specific, comprehensive,
sustainable IT strategy with
well-defined goals and target
timelines

Source: Capgemini

Why IT must be a driver

What, though, does sustainability mean for your IT? It's a question that's often overlooked: in far too many companies, sustainability strategy begins as a set of vague, top-down directives from business that fail to take root from the bottom-up, where IT is best placed to help. According to [Capgemini](#), a global technology consultant, only 18% of 1,000 large organizations surveyed have a specific, comprehensive, and sustainable IT strategy, with well-defined goals and target timelines. Nearly half these companies say they lack the tools to adopt and deploy solutions for sustainability initiatives.

At Software AG, we believe IT has a critical role to play in helping all companies build a more sustainable future. Not only does IT itself contribute significantly to the world's carbon footprint; it's also central to the transformation your company's business and operating models, just like it was for digitalization.

Toward a sustainable IT framework

In the following guide, we'll help you understand how focusing on sustainable IT can help your company improve energy efficiency, boost compliance with ESG regulations, and transform your operating model to take advantage of opportunities the sustainability disruption offers for the world of business. We'll then show you how [enterprise architecture](#) and [strategic portfolio management](#)—EAM/SPM—can help you build a sustainable IT framework that bridges the gap between business strategy and IT project execution, and helps you operationalize a wider corporate [sustainability strategy](#). First, though, we'll dive a little deeper into what sustainability in IT means in practice and why a stop-gap approach won't yield the results you desire.

Reduce and rethink

Are you an IT leader looking to embrace sustainability in your company? If so, knowing where to start can feel overwhelming. Even today, there are no universal key performance indicators to measure an organization's environmental impact—let alone agreed-upon standards for reporting on sustainability in IT. Still, there are several areas where IT can be a critical sustainably driver.

The hard truths about IT's carbon footprint

To start, any company bent on sustainability will need to scrutinize its own IT operations. Though it's not widely acknowledged, enterprise IT contributes significantly to the world's carbon footprint. By 2030, according to [Digital Information World](#), 21% of global electricity consumption will be used for ICT production and operation. According to [Capgemini](#), 55.5 million tons of e-waste was generated worldwide in 2020—an increase of 20% over the previous five years. Only one out of ten organizations, it estimates, recycle more than 10% of their hardware. Globally, [just 43% of executives](#) say they are even aware of their organization's IT footprint.



of the global electricity consumption is used for production and operation of ICT (by 2030)

Source: Digital Information World



increase in production of e-waste in the last five years—55.5 million tons

Source: Capgemini



of executives are aware of their organization's IT carbon footprint

Source: Capgemini

What does a more sustainable IT entail?

By focusing on sustainability in IT, you can work to reduce these environmental costs—and also rethink your IT systems to drive greener operations across the whole organization. Sustainability initiatives rooted in IT change can help companies:

- Improve energy efficiency, by evaluating consumption and enabling measures to reduce usage
- Embrace green sourcing by purchasing their electricity from renewable providers
- Reduce e-waste by boosting the circularity of hardware and ensure sourcing from accountable vendors
- Generate data for analysis and compliance with sustainability regulations
- Build the foundation for a new operating model that bridges IT and corporate strategy and puts sustainable innovation front and center

Steering clear of misguided approaches

While the above initiatives offer great promise, they're not easy to achieve—especially for organizations that lack an integrated, cohesive view of their IT landscape. In such an environment, incomplete information can lead to misguided approaches. Without the right set of tools, IT managers may:

- Make decisions based solely on green initiatives—without considering the impact on other areas of business
- Respond to requests from regulators with inefficient, manually gathered data
- Seek out quick-fix solutions that treat sustainability as a one-time exercise—and put their companies at risk of greenwashing
- Fail to connect sustainability strategies between IT and business, leading to poorly executed projects

So, what's the cost of all of this?

A reliance on stop-gap solutions means your business will struggle to meet increasingly stringent ESG regulations. By continuously falling back to the status quo, the same problems will appear again and again, leading to decreased productivity and a weakened capacity to drive innovation and competitiveness. You'll miss out on opportunities to cut costs and drive new business, eroding trust among your employees and customers. Above all, you'll risk failing to fulfill your stated sustainability goals, while doing damage to your reputation.

Toward sustainable IT—with enterprise architecture and strategic portfolio management

Are you determined to avoid this fate—and ensure your IT positions your business to thrive amid the new sustainability disruption? The first step is acknowledging one central challenge: the need to view sustainability as a holistic endeavor between IT and business. For all the importance of sustainability, companies still need to ensure their survival: sustainability efforts don't simply supersede prudent financial decisions that maintain a company's competitiveness. Businesses today must strive for sustainability in all aspects of their operations and still fulfill their role as employers and providers of needed goods and services.

How, though, can you best achieve this balancing act? By adopting an EAM/SPM approach, you'll gain access to the data, analysis, planning, and management needed to draw connecting lines between business objectives and IT investment. You'll be able to assess your IT's current state, vetting it against sustainability goals and identifying needed changes. You'll have the tools you need to leverage your IT as the backbone of your green transformation—for cost savings, greater innovation, and new business opportunities.

IT areas of engagement for sustainability



The value of an EAM/SPM solution

How, exactly, can smart [IT portfolio management](#) help make your company greener? The right EAM/SPM tool should deliver these five capabilities:

- **Transparency.** To drive sustainability initiatives, you first need a rich and articulate information base that captures your complete IT landscape, including applications, technologies, locations, and vendors as they relate to business processes and strategy. By giving you a “whole view” of this landscape, an EAM/SPM solution will help you better understand your existing environmental impact—and make changes to reduce it. It will enable you to measure your electricity consumption by location and evaluate the environmental credentials of your power, energy, and water suppliers. You can then take steps to reduce usage and source from greener providers.
- **Rationalization.** One of the most immediate and impactful ways to reduce your carbon footprint—and achieve [operational excellence](#)—is by continuously scrutinizing your IT so that it uses less. An EAM/SPM approach can help you build a “green IT” portfolio—by identifying applications, technologies and locations that are unused, poorly performing, and/or energy intensive. You can take steps to retire, exchange, or migrate them to the cloud, eliminating resource waste and facilitating major cost reductions. This will ensure that you’re only running applications that are needed—in locations that are energy efficient.
- **Virtualization.** In today’s era of big data, most companies’ servers are a significant driver of enterprise IT greenhouse gas emissions. Public cloud providers, which benefit from economies of scale, tend to be more energy efficient, and are increasingly transparent about their data centers’ carbon impact. Moving your IT from on-premises to the cloud can be a great way to drive energy savings and make it easier to track and report your reductions. Yet this needs to be done smartly—without compromising business operations. An EAM/SPM platform will help you plan and manage your migration with full transparency—and minimal disruption.
- **Governance.** Sustainability-related policies, standards, laws, and regulations are compelling enterprises to spend more resources than ever demonstrating compliance and improving their supply chain visibility. ESG management and reporting has become a full-time job—and far too many companies make it more time-consuming than necessary by relying on the manual gathering of data. An EAM/SPM solution will give you the tools to respond to regulatory demands with the right numbers and answers. It will improve sustainability governance through all aspects of IT, while helping you ensure you’re sourcing from sustainable third-party vendors.
- **Strategy execution.** To drive your green transformation, and generate real results, you need to approach sustainable IT with well-defined goals and target timelines that are derived from your business strategy. Organizations must bridge the gap between high level commitments and a practical framework for their execution—from the C-suite down through all levels of management. The transparency and visibility that EAM/SPM delivers will help you understand which IT changes are needed to build and execute your corporate sustainability strategy. An EAM/SPM approach will empower you to leverage your IT as the backbone of your green transformation—by designing your strategy, tracking its progress, and adapting it over time as necessary.

Be a leader, not a follower

How prepared is your enterprise for the disruption now upon us? As the business case for sustainability grows stronger, companies that take deliberate measures to define strategy, track metrics, and orchestrate results for their sustainability goals will have distinct market advantages. Not only will neglecting your environmental and social impact have detrimental effects on your existing business; pledging or making empty declarations will also lead to lost opportunities. In today’s world, sustainability isn’t separate from business strategy—it’s an essential part of it. By leveraging your IT as the backbone of your green transformation, you’ll be ready to embrace innovation—and outperform the competition.

If all of this feels overwhelming, you're not alone: with nearly every industry under scrutiny, and regulations constantly evolving, it can be difficult to know where to start. Thankfully, you don't have to navigate this great disruption by yourself. At Software AG, planning and managing **IT transformation** is what we do best. We were there to help our customers thrive when the great disruptor was *digital*. And we're here now to help you navigate *sustainability*—by making sense of its demands and seizing its opportunities.

We invite you to learn more about our industry-leading EAM/SPM solutions, and the many ways we can help your IT and business thrive—while contributing to a more sustainable future.

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