

The ROI of sustainability

How certification creates measurable value



Introduction

In healthcare, sustainability is often framed as an aspiration: admirable, important, but somehow optional. In laboratory medicine, that illusion does not last long. Laboratories run continuously to provide answers for diagnoses and treatment decisions, but this essential work carries a hidden cost. Diagnostic networks rely on energy-intensive equipment, consume significant water resources, and generate large volumes of hazardous waste. In such an environment – where accuracy, reliability, and turnaround times are non-negotiable – sustainability stops being a slogan and becomes part of operations management.

Professora Doutora Maria José Rego de Sousa, co-CEO of Centro de Medicina Laboratorial Germano de Sousa, a large private laboratory chain in Portugal, experienced this shift firsthand. For her, recognizing sustainability as a driver of long-term success and organizational resilience was a turning point.

Sustainability, she argues, belongs not in a side program but at the center of leadership. And in a business where credibility matters, external certification – in this case, My Green Lab – is a way to make that commitment visible, measurable, and harder to drift away from. Her experience highlights that embedding sustainability into strategy and culture is relevant to leaders across the entire healthcare system, not just in laboratory settings.

What follows is a conversation with Prof. Maria José Sousa about why sustainability has become an issue demanding CEO attention, why external certification matters, and why the future of laboratory medicine may depend less on grand gestures than on the cumulative impact of better daily habits.



The co-CEOs of Centro de Medicina Laboratorial Germano de Sousa: Prof. Maria José Sousa (foreground), Prof. Dr. Germano de Sousa (right) and Dr. José Germano de Sousa (left).

Interview

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Prof. Maria José Sousa, thank you for speaking with us. Your medical laboratories are a model of sustainability and much of the credit for that goes to you. As CEO you must juggle countless issues, and deciding what to focus your attention on is an essential part of your job. When did you realize that sustainability was a topic that demanded your personal, hands-on attention?

Prof. Maria José Sousa

Sustainability became a CEO-level priority when it became clear that it shapes the long-term health of our organization in much the same way as clinical quality and trust. In a healthcare business, those are not separate concerns. The reliability of our operations, the confidence of our stakeholders, and our capacity to adapt over time are all interconnected, and sustainability increasingly influences all three.

What changed was not simply our awareness of environmental issues, but our understanding of how deeply they affect the fundamentals of our business. As sustainability began to inform strategic decisions, investment choices, and the way we prepared for future regulatory, environmental, and societal expectations, it could no longer be treated as a peripheral topic

“Organizations that treat sustainability as a compliance exercise tend to be reactive when they should be preparing.”

Prof. Maria José Sousa

or a delegated function. It had to become part of the leadership agenda because it was shaping the future of the organization.

That’s especially true in laboratory medicine, where the operating model is resource-intensive, continuous, and highly dependent on resilient systems. Energy use, supply chain robustness, waste management, equipment performance, and workforce sustainability are not abstract concerns in a lab setting. They influence continuity of service, cost stability, turnaround times, and ultimately patient trust. Once that connection becomes clear, sustainability is no longer something you can manage from the sidelines. It has to be led from the top.

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What risks are laboratory networks still underestimating?

Prof. Maria José Sousa

One of the most underestimated risks is the fragility created by energy and resource intensity. Clinical laboratories run around the clock. They depend on energy-heavy analytical platforms, cold chains, ventilation, automation, and large volumes of single-use materials. Too often, these are treated as technical givens rather than strategic exposures.





Regulation is another blind spot. Sustainability requirements are moving fast, not just in environmental law but in the expectations of healthcare systems, accreditation bodies, and payers. Organizations that treat sustainability as a compliance exercise tend to be reactive when they should be preparing.

The same is true of resource dependency. Water, chemicals, reagents, and global supply chains all create fragility when they are not managed with discipline. In diagnostics, resilience and reliability are inseparable. Underestimating these risks is not just a sustainability issue; it's a business and clinical problem.

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You mentioned that it can be difficult to maintain an overview of issues like how much energy is being consumed and that this can lead to vulnerabilities and compromise service reliability. In a pathology network, which everyday operational factors tend to drive hidden costs and create pressure on efficiency, compliance, and long-term resilience?

Prof. Maria José Sousa

Hidden costs usually surface in the parts of the operation that are easiest to overlook because they are so familiar. In pathology networks, that often means the steady, day-to-day demands of running continuously: equipment that never really turns off, cold storage that must be maintained, ventilation systems that keep

the environment stable, and the large volume of consumables needed to keep everything moving.

Those are not small operational details. They are the structure of the business. And because they're so embedded, they can become sources of cost volatility before they become visible as risks. This is true for materials. Reagents, plastics, chemicals, and water may seem routine, but they are exactly where supply pressure, price increases, and waste tend to accumulate.

Regulatory and accreditation pressure is another underestimated factor. Environmental requirements, sustainability reporting, and expectations from healthcare systems and payers are evolving quickly. For pathology networks, responding reactively increases compliance costs and operational burden, while integrated planning offers predictability and resilience.

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Many organizations try to do their part by establishing internal targets for things like energy reduction or recycling, then stop there. You chose to participate in external certification from My Green Lab. What did that add?



Prof. Maria José Sousa

In laboratory medicine, credibility matters. We chose an external certification, My Green Lab, because sustainability must be as rigorous, evidence-based, and benchmarked as our clinical practice. Internal targets matter, but on their own they can remain inward-looking. An external framework adds structure, comparability, and independent validation.

That is especially valuable in a laboratory network where the realities of sustainability are distributed across equipment, workflows, consumables, and everyday behavior. My Green Lab translates those realities into the language of operations. It makes sustainability concrete, measurable, and consistent across sites and teams.

Just as important, external certification sends a signal. It tells people inside and outside the organization that sustainability is not being treated as a slogan or a side project. It is being handled with the same discipline as clinical excellence. In a sector where quality and reliability are non-negotiable, that kind of independent validation is not just helpful, it's part of the strategy.



What is My Green Lab Certification?

My Green Lab Certification is a globally recognized sustainability standard designed specifically for laboratories. It helps organizations reduce their environmental impact while maintaining scientific excellence by providing a structured framework and assessment process that evaluates lab practices across areas such as energy use, water consumption, waste management, purchasing, and culture. Based on performance, labs receive a certification level on a five-step scale (Bronze, Silver, Gold, Platinum, Green), encouraging continuous improvement and measurable progress. The certification not only supports institutions in reducing costs and carbon footprint but also fosters a culture of sustainability and accountability within scientific research environments.

Siemens Healthineers healthcare consultants are My Green Lab Accredited Professionals and can support facilities in achieving certification. Siemens Healthineers is the exclusive market accelerator for Europe and the UK for the My Green Lab certification program.

[**➤ Find out more here.**](#)

*“Small changes had an outsized effect
once people understood why they mattered.”*

Prof. Maria José Sousa

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What changed once sustainability was no longer just a goal, but something you could measure against an external standard?

Prof. Maria José Sousa

My Green Lab certification mattered because it moved sustainability out of the realm of aspiration and into the realm of operations. It gave us a structured, science-based framework that made resource use visible, measurable, and actionable where it matters – in equipment, workflows, and daily behavior.

Operationally, the biggest benefit was consistency. Across a laboratory network, small differences in practice can add up quickly. The certification helped standardize good behaviors across units, especially in the areas that carry the most weight in pathology: energy-intensive equipment, cold chains, consumables, reagents, waste, and purchasing choices. That improved efficiency, reduced unnecessary waste, and gave us better control over energy and resource consumption. In a business where continuity is essential and cost pressure is real, those are not minor gains.



Prof. Maria José Sousa (right) with fellow co-CEOs Prof. Dr. Germano de Sousa and Dr. José Germano de Sousa (left).

“Frameworks like My Green Lab don’t add complexity for its own sake. They create structure.”

Prof. Maria José Sousa

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Let’s look at actual results: Which changes delivered the biggest payoff – and what did the certification process reveal about your teams?

Prof. Maria José Sousa

The biggest impact came from standardizing behavior at the bench level across the network. My Green Lab turned sustainability into something concrete and operational. By focusing on how laboratories actually work day to day, it reduced variability across sites and made resource use more consistent and more efficient.

One of the most important shifts was making resource use visible. Once teams could see where energy-intensive equipment, cold storage, and workflows were driving impact, they could make better decisions. That also strengthened our ISO 14001 continuous-improvement cycle, because objectives and corrective actions were now tied to laboratory reality rather than to abstract targets.

What surprised us most was how quickly culture moved once the work became practical. Small changes – revisiting equipment use patterns, tightening inventory discipline, questioning habits that had gone unexamined for years – had an outsized effect once people understood why they mattered. The external benchmarks mattered too. Independent assessment created a shared sense of credibility and accountability across the network.

In the end, the biggest lesson was that the most powerful lever is not a single technology or investment. It’s alignment: people, practices, and purpose working within a clear operating framework.



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My Green Lab certification resulted in a lot of changes to how you work internally. Did it also impact how you are perceived by external stakeholders, for example investors, patients, or suppliers? If so, how?

Prof. Maria José Sousa

My Green Lab certification has helped shift stakeholder perception from sustainability as an intention to sustainability

as a managed, credible, and embedded practice. For partners – including healthcare institutions, suppliers, and technology providers – it signals that we approach sustainability with the same rigor as quality and safety, grounded in shared standards and transparent decision-making.

For patients, the effect is less visible but still important: it reinforces trust by showing that we take responsibility not only for diagnostic excellence but also for the environmental and ethical footprint of healthcare.

For investors and governance stakeholders, certification provides external validation and comparability. It shows that sustainability is structured, benchmarked, and integrated with systems like ISO 14001, which helps reduce ESG risk and demonstrate preparedness in a fast-changing regulatory environment.

Overall, certification positions the organization as a forward-looking and resilient healthcare partner. It makes clear that in pathology and diagnostics, sustainability is not peripheral – it is part of quality, governance, and long-term value creation.



"When employees see that sustainability improves efficiency, safety, and resilience, engagement follows."

Prof. Maria José Sousa

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Sustainability efforts are sometimes ranked lower than other operational issues and treated as an afterthought. What do organizations risk when they wait too long to act on sustainability?

Prof. Maria José Sousa

The biggest risk is existential: they risk losing control over their own future.

For laboratory and healthcare organizations, delay subjects them to energy exposure, regulatory pressure, resource dependency, and allows cultural inertia to build quietly in the background. What may look like prudence in the short term often becomes structural vulnerability later: higher operating costs, weaker resilience, diminished credibility, and less room to adapt when conditions inevitably change.

That's why frameworks such as ISO 14001 and My Green Lab matter. They don't add complexity for its own sake, they create structure. They help organizations to see their environmental vulnerabilities clearly, anticipate risk rather than react to it,

“When organizations wait too long to act on sustainability, they risk losing control over their own future.”

Prof. Maria José Sousa

and build continuous improvement into daily operations. Without that discipline, organizations tend to find themselves catching up when energy markets move, supply chains strain, or regulatory expectations tighten.

There is also a cultural cost to delay. Sustainability efforts that are postponed are easily treated as optional, and optional things rarely hold attention for long. Over time, that weakens engagement and makes transformation more difficult and more expensive. By contrast, early action normalizes sustainability as part of quality, safety, and professional responsibility.

In the end, the real danger is not missing a target or failing an audit. It is eroding resilience. In healthcare, sustainability is about preserving the capacity to deliver safe, high-quality care over time. Organizations that wait too long may discover that sustainability is no longer a choice – it is an urgent prerequisite.



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Many healthcare leaders support sustainability and are committed to initiating new projects, but don't know where to start. The possibilities can seem vast and confusing which, as you note, can lead to inertia. Based on your experience, where should they begin?

Prof. Maria José Sousa

My advice is to treat sustainability first as a governance and risk issue, not as a communications or CSR exercise. At board level, it is no longer a side topic. It is part of strategic oversight. Frameworks such as the Corporate Sustainability Reporting Directive (CSRD) make that clear: they require leadership to understand how environmental and social issues translate into financial risk, operational exposure, and long-term value creation – and to show that those risks are being managed through proper governance, controls, and data.

In healthcare, sustainability becomes meaningful only when it is treated as an operational discipline. Start by identifying where your real impacts lie: energy use, critical infrastructure, supply chains, consumables, and daily clinical operations. You don't need perfect data to begin, but you do need structure. Frameworks such as ISO 14001 and My Green Lab are useful precisely because they link leadership commitment to measurable improvement and accountability.

The other trap to avoid is waiting for full alignment before taking action. In laboratory and healthcare settings, progress tends to create clarity, not the other way around. Small, well-designed initiatives in high-impact areas generate quick learning, build engagement, and create momentum for broader change.

Most importantly, sustainability must be owned by leadership, not delegated away. When the C-suite is visibly involved, sustainability becomes part of quality, safety, and resilience. When it is isolated, it remains fragile. The organizations that succeed are not necessarily the ones that move fastest. They are the ones that move deliberately, build continuous improvement into the culture, and align sustainability with the core mission of care.

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What would you want other hospital and laboratory leaders to take from your experience?

“There is a cultural cost to delay. Sustainability efforts that are postponed are easily treated as optional.”

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The main lesson is that sustainability in laboratories is not a question of scale or resources. It is a question of structure, priorities, and leadership intent. Meaningful progress is possible when sustainability is built into daily practice and aligned with quality and operational management systems, rather than left as a parallel initiative with its own language and deadlines.

There is also a cultural lesson here. People are the primary lever of change. When professionals see that sustainability improves efficiency, safety, and resilience – rather than adding administrative burden – engagement follows. And when small changes are designed well, they scale surprisingly far.

“My advice is to treat sustainability as a governance and risk issue, not as a communications exercise.”

Prof. Maria José Sousa

The larger point is that sustainability is also a resilience strategy. Laboratories are under pressure from energy volatility, supply-chain dependence, and rising regulatory expectations. A structured approach helps organizations anticipate risk and strengthen control without compromising diagnostic quality.

For other networks, the message is simple: sustainability does not require reinventing laboratory medicine. It requires making existing practice more deliberate, more measurable, and more aligned with long-term responsibility.

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Thank you for speaking with us today.
It's been an insightful conversation!

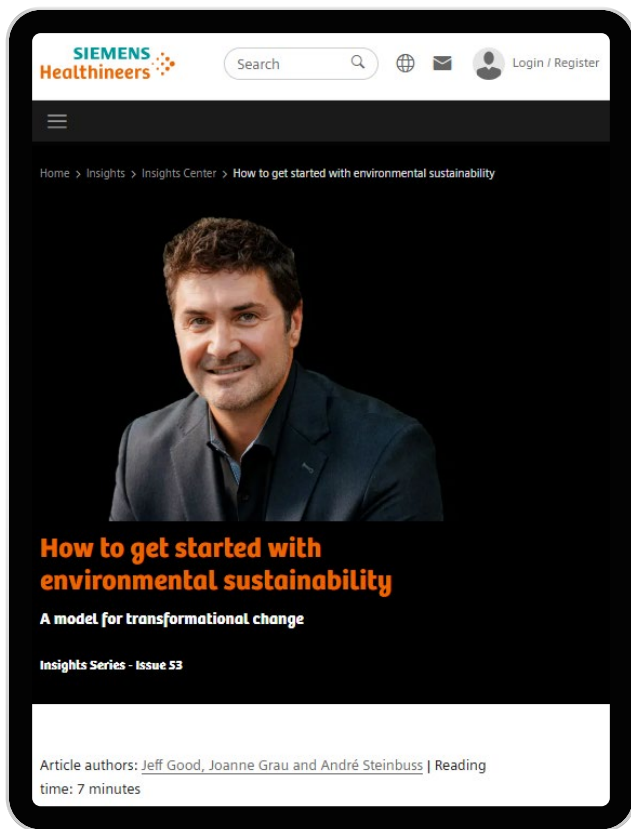


About Centro de Medicina Laboratorial Germano de Sousa



Germano de Sousa Group is one of Portugal's leading laboratory medicine networks, with more than 50 years of experience supporting clinicians and patients in diagnostic decision-making. The group comprises a broad, integrated network of clinical pathology laboratories complemented by specialized capabilities in anatomical pathology and genetics and genomics, reflecting a strong commitment to innovation and advanced diagnostics. Today, it operates more than 17 laboratories and over 550 sample collection points, supported by a multidisciplinary team of more than 1,600 professionals. Rooted in a mission to provide accurate, timely, and clinically meaningful results, the organization combines scientific expertise, continuous research and development, and modern technologies to stay at the forefront of laboratory medicine while maintaining a strong focus on quality, reliability, and patient-centered care.

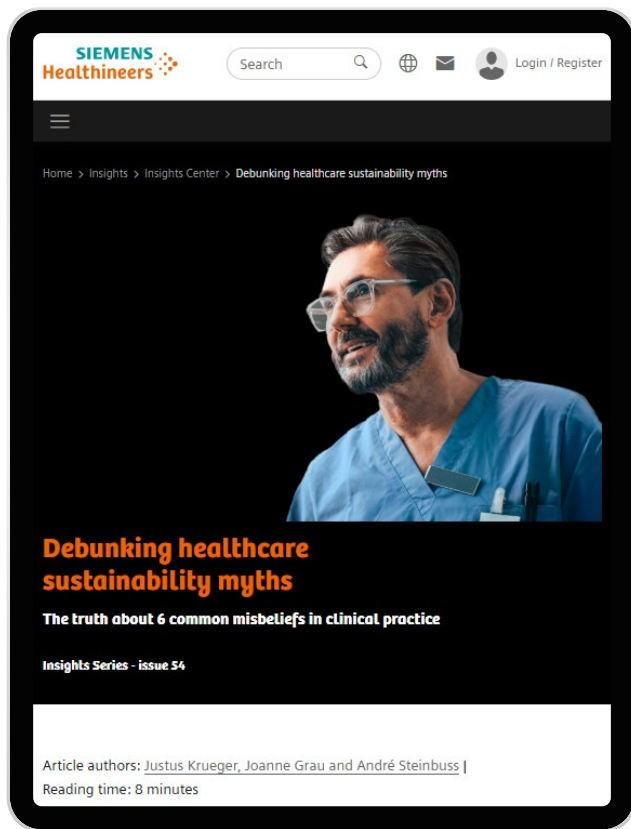
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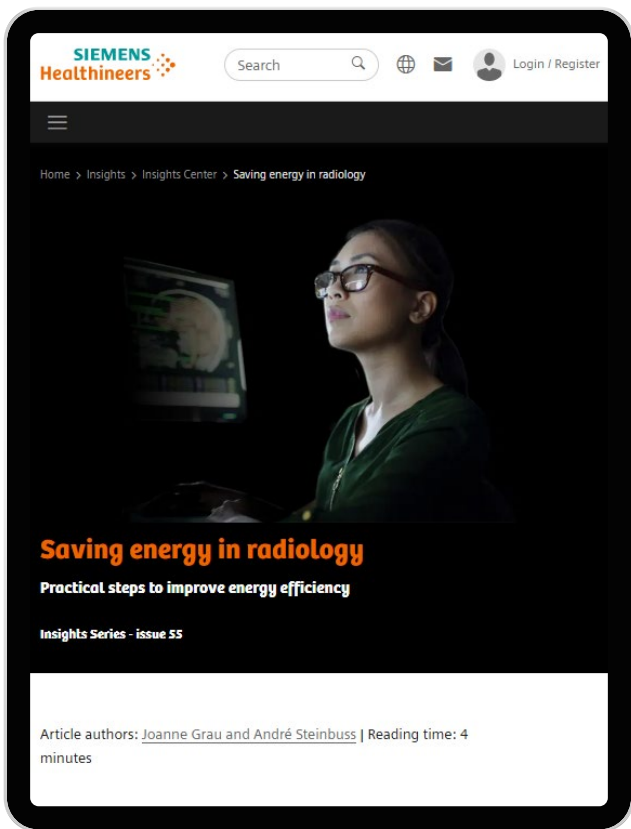
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Prof. Dr. Maria José Rego de Sousa is a distinguished clinical pathologist and healthcare leader. She serves as the Co-Administrator of the Germano de Sousa Group and is an Invited Associate Professor and Head of the Laboratory Medicine Curriculum Unit at NOVA Medical School, Universidade Nova de Lisboa. A former President of the Portuguese Society of Clinical Pathology (2017–2023), she is recognized for her

contributions to advancing laboratory medicine in Portugal. Prof. Maria José Sousa holds a PhD and a Master’s degree from Universidade Nova de Lisboa and oversees the Immunopathology and Autoimmunity Laboratory, the Prenatal Diagnostics Unit, and quality management initiatives at Germano de Sousa. Her career combines clinical expertise, academic leadership, and strategic management in diagnostic medicine.



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Based in Germany, Joanne Grau brings over 16 years of global marketing experience at Siemens Healthineers, spanning the U.S., Asia, and Europe. She began her career as a molecular biology researcher and has authored multiple scientific publications.



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André Steinbuss is a Strategic Marketing Manager at Siemens Healthineers. His work in the Corporate Marketing department is dedicated to today’s challenges in healthcare: staff shortage, planetary health, and digitalizing healthcare. He has been with the company for more than 20 years.

At Siemens Healthineers, we pioneer breakthroughs in healthcare. For everyone. Everywhere. Sustainably. As a leading medical technology company, we want to advance a world in which breakthroughs in healthcare create new possibilities sustainably. We've been pushing the boundaries in medical technology for more than 125 years. Today, we are active in imaging, diagnostics, cancer care, and minimally invasive therapies – augmented by digital technologies and artificial intelligence.

With our unique combination of strengths in Patient Twinning¹, Precision Therapy, and Healthcare AI, we take on the greatest challenges in healthcare. We help improve access to healthcare for underserved communities worldwide and overcome the most threatening diseases: Neurodegenerative and cardiovascular diseases, stroke, and cancer. We partner with healthcare providers to address their most pressing challenges so that they can deliver high-quality, patient-centered care, efficiently.

¹Early detection, accurate diagnosis, individualized therapy selection, simulation and planning, continuous monitoring, and aftercare.

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