

# Sustainability Transformed: SPE's History is a Blueprint for Lasting Leadership and Impact

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SPE's journey in sustainability leadership demonstrates how early vision, persistent advocacy, and deliberate organizational action can transform an emerging topic into a core strategic priority. The main takeaway is that sustainability, once championed by a handful of leaders, is now deeply embedded in the Society of Petroleum Engineers' governance and technical culture. For technical sections and volunteer leaders, several key lessons stand out: first, the importance of aligning sustainability efforts with technical excellence and organizational values; second, the need to establish dedicated leadership structures and clear mission statements to drive progress; and third, the value of engaging members through targeted programs, training, and open dialogue. SPE's experience shows that lasting change happens when leaders consistently reinforce sustainability as a professional obligation, foster innovation, and build communities that support continuous improvement. By learning from the Sustainable Development Technical Section strategic approach, technical sections and volunteers can accelerate their own impact, ensuring that their initiatives become integral to their organization's identity and future direction.

Sustainability has been woven into the fabric of SPE for decades, championed by leaders who recognized early that responsible energy development is inseparable from technical excellence. The conversation began taking shape under the vision of 1988 SPE President Dr. Lyn Arscott, whose 2001–2002 Distinguished Lecturer tour brought sustainable development to the forefront of the global membership. By 2003, SPE was advancing the dialogue through foundational work such as the edited version of Dr. Arscott's SPE paper 83062, *Sustainable Development in the Oil and Gas Industry*, presented at the SPE/EPA/DOE Exploration and Production Environmental Conference in San Antonio, Texas and later published in the JPT HSE Horizons article (*SPE-0903-0079-JPT*).

Across successive generations of leadership, SPE Presidents and HSE & Sustainability Technical Directors have steadily advanced sustainability from an emerging conversation into a defining strategic priority for the Society. What began as early advocacy has become a defining leadership thread, carried forward by SPE's most senior leaders. Many presidents—including Helge Haldorsen, Janeen Judah, Darcy Spady, Sami Alnuaim, Tom Blasingame, Kamel Ben-Naceur, Terry Palisch and Olivier Houzé — have each, in their own way, elevated sustainability themes of people, resilience, responsible development, energy transition, operational excellence, community impact, and long-term stewardship.

Equally influential, every HSE and Sustainability Technical Director has championed sustainability as a core professional obligation, shaping technical programs, guiding global discourse, and reinforcing SPE's role as a trusted voice in responsible energy development. Together, these leaders have positioned sustainability not as an optional add-on, but as a catalyst for innovation and a guiding principle for the upstream industry's future.

The year 2010 marked a turning point for SPE, when sustainability advanced from individual advocacy to an established organizational priority with dedicated leadership and structure. After attending the AIChE and ASCE joint workshop entitled "*Engineering Solutions for Sustainability: Materials & Resources*" Lausanne, Switzerland in 2009 with Kamel Ben-Naceur, Behrooz Fattahi, SPE President at the time, proposed to the SPE Board of Directors the formation of a Sustainable Development Committee to guide SPE's strategy on sustainability, define its mission, and position SPE as an active contributor to global sustainability discussions. The Board of Directors approved the proposal. Tom Knode, then serving as HSES Technical Director, recognized the moment and tapped Johana Dunlop to lead the emerging sustainability initiative. From 2010–2012, the committee actively defined its mission and desired outcomes and the Board of Directors endorsed the Sustainability Business Plan in 2013 and approved the Task Force's definition of Sustainable Development in 2014. Then, under SPE's updated governance model, the Sustainability Committee transitioned to a Task Force in 2014 during Roland Moreau's tenure as HSES Technical Director and the Task Force reported to the Finance and Strategy Committee.

By 2015, the Sustainability Task Force—building on the support of HSE Technical Directors Tom Knode and Roland Moreau and guided by Johana Dunlop's leadership and others—had met all SPE requirements to establish a new technical section. The group had put in place a clear leadership framework, drafted a formal constitution, and secured endorsement from Trey Shaffer, then serving as the HSSE-SR Technical Director.

During this period, the Task Force also demonstrated strong member engagement. It delivered a series of focused webinars and significantly, Roland Moreau and Johana Dunlop co-developed and launched SPE's first Sustainable Development training course, "The Sustainability Imperative", in Denver, Colorado in 2015, held in conjunction with the North American HSE Conference more than 20 years after Lyn Arscott's presentation at the same conference series in 2003. These efforts provided tangible evidence of both demand and readiness for a dedicated sustainability community within SPE.

With these milestones achieved, SPE formally approved the creation of the Sustainable Development Technical Section in 2015, appointing Johana Dunlop as its inaugural Chair. On March 7, 2016, in the wake of global developments in climate policy such as the Paris Agreement adopted at COP21, the SPE Board of Directors under the leadership of SPE

2016 President Nathan Meehan established a Climate Change Task Force to develop and recommend a strategic response for the Society. Chaired by Trey Shaffer, the Task Force was charged with assessing the key technical and public-perception dimensions of climate change, reviewing how peer professional organizations were addressing the issue, and identifying potential actions for SPE to consider. The team completed its work and presented its recommendations to the SPE Board of Directors on March 26, 2017 in Bangkok, Thailand.

Later in 2019, about 50 handpicked representatives from eight stakeholder groups—operators, service companies, academia, students, investors, activists, associations, and sustainability professionals—collaborated with Johana Dunlop and the team on SPE’s inaugural *Gaia Summit* in Fontainebleau, France. This initiative now stands as the primary programming channel for the Sustainable Development Technical Section. The Gaia Summit embodies the power of collaboration: by uniting representatives from diverse viewpoints, it fostered cross-disciplinary dialogue, collective problem-solving, and a shared pursuit of technical excellence and organizational values. Through this collaborative effort, the Summit established a clear leadership structure and mission, engaged participants with facilitated discussions, and reinforced sustainability as a professional obligation. Most importantly, it cultivated a vibrant community dedicated to ongoing innovation, collaboration and continuous improvement. By accelerating the integration of sustainability within SPE, the Gaia Summit ensured these collaborative initiatives became an integral part of the organization’s identity and future direction, reflecting the lessons learned from the Sustainable Development Technical Section’s strategic leadership approach.

Since its creation and the introduction of the Gaia Programming structure, the Sustainable Development Technical Section (SDTS) has grown into an active community. Under the leadership of Chairs like Johana Dunlop, Linda Battalora, Phil Grossweiler, Josh Etkind, Trey Shaffer, and today Farshid Mostowfi, SDTS has advanced sustainability, collaboration, and innovation within the Society of Petroleum Engineers—notably through 160+ Gaia Talks, Gaia Masterclasses including a significant number produced in collaboration with sister technical sections such as Water, CCS, Methane, R&D and Hydrogen. The section’s archive includes an extensive library of content that can be found at: <https://connect.spe.org/sdts/events-overview2>

SPE’s journey in sustainability leadership is ultimately a story of persistence, vision, and collective action. Throughout this journey, the significant efforts and contributions made have been formally acknowledged and celebrated. In 2022, the SDTS won the first Presidents’ Award for Technical Section’s under Josh Etkind’s leadership and was further recognized as an Outstanding Technical Section under Trey Shaffer’s leadership in 2025. What began as the conviction of a few early champions has grown into a global movement embedded across the Society’s governance, technical programs, and

professional culture. Through the sustained efforts of presidents, technical directors, volunteers, and the dedicated leaders of the Sustainable Development Technical Section and Gaia Program, SPE has built a durable foundation that continues to shape how the industry understands responsible energy development. As the challenges facing the energy system grow more complex, SPE's commitment to sustainability—rooted in decades of leadership and strengthened by an engaged, forward-looking community—positions the Society to remain a trusted, influential voice in guiding the upstream industry toward a more resilient and sustainable future.

### **Acknowledgements**

This account was shaped and strengthened by the recollections and expertise of former HSE and Sustainability Technical Directors Johana Dunlop, Roland Moreau, and Tom Knode, whose leadership has left a lasting imprint on SPE's sustainability journey.

It is important to recognise that SPE's progress in Sustainability has been shaped by the efforts of numerous individuals, many whose contributions may not be fully captured in the historical record. While this account highlights key milestones and leaders, countless others have played valuable roles, even if their impact is not specifically acknowledged here.

### **About the Author**

Trey Shaffer served on the SPE International Board of Directors as the HSSE-SR Technical Director from 2014 to 2017. He was later elected to the Gulf Coast Section (GCS) Board of Directors (2017–2019) and served as Section Chair in 2018, guiding the GCS to earn the SPE President's Award for Section Excellence that same year. Most recently, he served as Chair of the SPE Sustainable Development Technical Section from 2023 to 2025, during which the SDTS was selected to receive the 2025 Technical Section Excellence Award. Throughout his decades of service, Trey has been recognized with numerous SPE honors for his leadership, commitment, and sustained contributions to the Society.