

Petroleum engineers: Unsung but advancing the quality of life

Scott Wilson, senior vice president at Ryder Scott, penned an editorial, “Why We Matter,” in the March *JPT* magazine published by the Society of Petroleum Engineers. It is an ode to every petroleum engineer who helps satisfy the world’s energy demands through development of hydrocarbon resources.



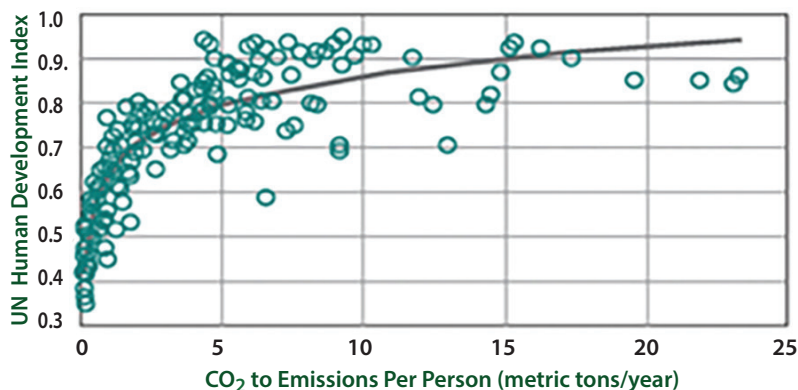
Scott Wilson

“When worldwide oil and gas consumption reached record levels yet again in 2017, SPE members were there when it counted, helping to generate more light and power for billions of people across the world,” he wrote.

Wilson, a petroleum engineer, looks back to a time when society was lifted out of poverty by cheap energy. “For more than five generations, the oil and gas industry has helped raise living standards; protected environments by replacing firewood with natural gas and propane; and provided food to hungry people by increasing farming productivity, transportation, refrigeration, and packaging,” he wrote. “Before hydrocarbons, the great whales were almost hunted to extinction to provide oil for lamps.”

The first part of Wilson’s theme is that petroleum engineers matter despite being rebuffed by Western societies with ideas about energy that don’t always square with science and current economics — two pillars of the reserves evaluation sector.

The second part focuses on a review confirming that higher CO₂ emissions correlate with a greater quality of life for third world countries, emerging economies and beyond that until the population becomes highly industrialized and enriched.



The relationship between CO₂ emissions per person and quality of life as expressed in the United Nations Human Development Index.

At that point, as the population emits more CO₂, incremental benefits diminish. Please see chart from the United Nations Human Development Index study showing the leveling out of quality of life.

Wilson questions whether those upscale populations have forgotten what life was like without fossil fuels. As an example of an underappreciation of the industry, Wilson referred to a 2018 proposal in Colorado that “ostensibly in the name of safety, would have pushed the oil and gas industry out of the state by cutting off access to future drilling locations.”

Please see the proposition, which was defeated, at <https://dcgop.org/proposition112/>.

Before the referendum, Wilson decided to canvass his neighborhood in the Denver suburbs to make the case for fossil fuels, asking each neighbor how he or she felt about effectively banning the oil and gas industry. Through his man-on-the-street interviews, he discovered what public relations practitioners have confirmed for some time now, and that is emotional appeals are more persuasive than logical ones and ultimately, drive decision-making.

“I quickly realized some were motivated by fear and beliefs not rooted in reality. To them, this sinister new trend known as ‘fracking’ was responsible for sinkholes, pipeline leaks, all earthquakes and inclement weather,” he wrote. “While each person ... was polite and talked with me until I had ‘worn out my welcome,’ this vocal minority seemed uninterested in information that might challenge their beliefs.”

Wilson observed paradoxes in Western cultures enriched by oil and gas that shun the industry at every turn. Among his examples are the yellow-vest protests in France and oil antagonism in Norway and the U.K.

Wilson sees parallels in the overreaction to the Fukushima Daiichi nuclear disaster caused by a tsunami. “After the disaster, Germany announced it would close all its zero-emission nuclear plants by 2022, even though only one of 17 active plants was near an ocean,” he wrote.

Wilson wraps up the editorial with his failed attempt to switch to solar power as an alternative, cheaper energy source. “It was only after I installed a solar hot water system that I realized the cost to run the two electric circulating pumps was more than the cost of gas to heat an equivalent amount of hot water,” he wrote.

Wilson concluded, “We provide a product that makes lives better for billions of people, and will continue to do so for decades to come.” The 1,700-word article, at press time, was published at <https://www.spe.org/en/jpt/jpt-article-detail/?art=5158>.