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Author

Kammen, Daniel M

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EDITORIAL

A decade of *Environmental Research Letters*: reflections and a vision for research in an era that needs action

Daniel M Kammen

Editor-in-Chief of Environmental Research Letters

E-mail: kammen@berkeley.edu

Ten years of activity

The first decade of *Environmental Research Letters* (ERL) has undoubtedly influenced a new phase of both basic environmental research, and applied—'use-inspired'—action. I have been thrilled—often challenged—and always inspired to have served as the founding *Editor-in-Chief*.

The key figures for ERL after a decade of life are important, with the latest ISI impact factor at 4.13 and around 180 000 downloads of articles per month, but they do not tell the whole story. A new and unknown journal in 2006 with a novel interdisciplinary format, ERL has grown to become a significant leader in the field. The open access letter model, as well as a commitment to publishing as fast as possible (our goal is 90 days from submission to publication), has allowed ERL to be at the centre of debate, and bring key event-based research to a global stage.

Our publication of the now ubiquitously cited '97 percent of research acknowledges the reality of anthropogenic climate change' [1] was tweeted by the US President Barack Obama's account, and has been downloaded 540 000 times in three and a half years. We published the first peer reviewed scientific paper on the health and cost impacts of the Volkswagen emissions fraud [2], as well as other work with direct policy implications, such as a key article highlighting premature deaths arising from biomass burning and major haze events in South East Asia [3]. Similarly, ERL has been a venue for papers that present analytical, social, behavioral [4], and philosophical challenges to prevailing assumptions, such as on excessive claims for the sustainability of biofuels [5].

I am especially proud of the level of conversation and activity around papers in ERL, something that we support through 'Perspective' commentary pieces on particularly noteworthy papers, via focus issues that compile important research on key topics, and through the dialog that *environmentalresearchweb*—ERL's companion news and views website—affords anyone in the community.

During this past decade we have published 2170 articles and have worked hard to represent a wide range of approaches to environmental studies. Our engagement with the community has been incredible, with an average of over 4000 downloads per article to date. The wider uptake and citation of ERL papers has been particularly heartening, with papers frequently quoted in, amongst many, the *New York Times*, *BBC*, *Guardian*, and the *Financial Times*, and a regular parade of papers appearing in the 'news and views' sections of top journals worldwide.

Leading the way

The path ahead on environmental issues means that the next decade will be critical, from the very local to the global scale. Even with all the progress in becoming more interdisciplinary, we'll have to accelerate and broaden this further to address the many challenges we face. The climate pathways that were the focus of COP21 and the Paris Accords are key. Next will come efforts in numerous areas; accounting and verification, the role and value of biodiversity, cultural and market issues in environmental sustainability, and the under-researched elements of resilience, adaptation, equity, injustice, gender, and behavior, to name just a few.

Perhaps most important is the degree to which new approaches-a coming of age, perhaps, of 'big data', behavioral economics, complexity theory, and pollution markets, as well as efforts to understand local change in a global context from many different disciplines—must now become the hallmark of environmental research. ERL is well positioned to be the journal of record or, rather, the journal of dialog and action in this coming era. The journal's Editorial Board is phenomenal and I could not imagine creating a better 'school of the environment' than one made by poaching every board member! These editors, and many of our authors and reviewers, all see research as the necessary foundation to significant action, and so a 'think tank' connected to a 'do tank' may be the shared mission that so many in our community see themselves immersed in. This is the 'solutions science' paradigm that ERL works to support. ERL remains the place where I publish what I consider to be my own most impact-focused and policy-relevant work [6].

All this is the good news. The challenges ERL faces are equally important of course. Firstly, the massive proliferation of journals of all flavors—traditional, online, open access, differing models of peer review—has flooded the field. Researchers now receive far more papers to review than they can deal with. As a result, the time to publication from submission has increased for many. For us this means we will continue to innovate and find ways to compress this timescale whilst maintaining rigor and quality, and strive to meet the 90-day rapid publication goal set when ERL was founded.

Secondly, the range of topics now clearly in the mainstream of environmental research has broadened, so that not all work, and not all fields, fit well into the letter format. To integrate this diversity of topics and styles, we have launched the *Environmental Research Reviews* (ERR) section, with Daniel Rubenstein of Princeton University as *Reviews Editor*, and a focus on systematic, evidence-based review articles. The combination of ERL and ERR means that we can now support very different types of papers and forms of scholarship. One obvious direction for us, and indeed all of environmental science, would be to hear more voices from the social sciences and humanities, and to provide them with expression and support in our pages.

Thirdly, ERL works to mitigate against any unintended bias in scholarly publishing towards authorship from Asia, Latin America, and Africa. We bridge

the gap with video abstracts (in several languages), article charge waivers for researchers from selected developing nations, and via focus issues featuring authors from under-represented regions, but we need to find more ways to support scholarship from all corners of the globe.

In thinking about what 'ERL at 20' could look like, it is clear that achieving sustainability requires a speed of action that we have simply never seen before. This will need a fast, deep, and action-oriented dialog to vet research, and to maintain an organic and flexible ethos so that ideas can rise and new collaborations are inspired. A strong and open journal such as ERL can support this. If we can look back at ERL in 2026 and say that we have continued to attract the most engaged researchers who actively welcome feedback and then put good ideas into practice, the next decade will have lived up to the first.

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