Stanford

Holmes Hummel, PhD

Managing Director, Energy Transition Strategies, Precourt Institute for Energy

Bio

BIO

Dr. Holmes Hummel is an interdisciplinary solutionary focused at the intersections of energy policy, technology, and finance. At Stanford, Dr. Hummel is drawing on two decades of experience that includes work in academia, private sector, public policy, and civil society organizations in order to accelerate just transitions by integrating concepts and practices of energy equity into energy education and research.

In collaboration with field partners, Dr. Hummel is also the founding co-director of Clean Energy Works, a public interest organization that accelerates investments in the clean energy economy by bridging multiple clean energy divides with inclusive financial solutions such as inclusive utility investment.

Previously, Dr. Hummel served as the Senior Policy Advisor in the Department of Energy's Office of Policy & International Affairs during the Recovery Act era of 2009-2013. In that capacity, Holmes brought insight gained as a Congressional Science Fellow selected by American Association for the Advancement of Science (AAAS), serving in the office of Jay Inslee, currently Governor of Washington, who served in Congress at that time. Dr. Hummel has also served on the Board of Cleantech Open, the world's largest cleantech accelerator.

In addition to prior work with energy innovators in the Silicon Valley, Dr. Hummel earned a doctorate degree from Stanford University's E-IPER program for interdisciplinary research on energy technology scenarios that achieve 100% clean energy.

While in the pursuit of solutions that accelerate just energy transitions, Dr. Hummel has taught Climate Policy Design at the Energy Resources Group at University of California in Berkeley and co-founded four new courses at Stanford, including Racial Equity in Energy and Quest for an Inclusive Clean Energy Economy, and the Justice 40 Policy Lab.

At Stanford, Holmes is the founding Resident Fellow of Explore Energy House, a residence hall with more than 80 co-housed undergraduate scholars with a shared interest in energy as an academic theme for their residential education. The Explore Energy Seminar hosted by the House welcomes participants from across the University community each quarter and features experiential education opportunities that are reinforced by Stanford's Explore Energy program.

CURRENT ROLE AT STANFORD

Energy Equity & Just Transitions, Managing Director

Precourt Institute for Energy

Resident Fellow, Explore Energy House

Coordinating Council Member, Environmental Justice Working Group

Advisory Member, Partnership in Climate Justice in the Bay

Collaborator in Collaborative Learning about Equity and Rapid Decarbonization (CLEAR Decarbonization), one of the first projects selected for an award from the Stanford Sustainability Accelerator

HONORS AND AWARDS

- Endorsement of clean transit finance concept, Global Innovation Lab for Climate Finance (2018)
- International Finalist, Climate Strategy Accelerator (2017)
- Finance for Resilience (FiRe) Award, Bloomberg New Energy Finance (2015)

EDUCATION AND CERTIFICATIONS

- Ph.D., Stanford University , Emmett Interdisciplinary Program in Environment and Resources (2006)
- M.S., Stanford University , Engineering (1999)
- B.S., Stanford University , Energy Engineering (Individually Designed Major) (1999)

PROJECTS

- Towards an Accessible Financing Solution - Clean Energy Works, for Building Decarbonization Coalition (1/1/2020)
- LIFT Solar Everywhere - Clean Energy Works, with Groundswell (10/1/2019)

Teaching

COURSES

2025-26

- Explore Energy Seminar: Launch: CEE 108B, CEE 208B, ENERGY 108B, ENERGY 208B (Win)
- Explore Energy Seminar: Navigate: CEE 208A, ENERGY 108A, ENERGY 208A (Aut)
- Explore Energy Seminar: Propel: CEE 108X, CEE 208X, ENERGY 108X, ENERGY 208X (Spr)
- Living Laboratory for Sustainability at Stanford: SUSTAIN 119, SUSTAIN 219 (Win)
- Quest for an Inclusive Clean Energy Economy: CEE 130B, CEE 330B, EARTHSYS 130B, EARTHSYS 330B (Win)
- Spatial Planning for Gigascale Renewables & Transmission: CEE 176M, CEE 276M, EARTHSYS 176M, EARTHSYS 276M (Spr)

2024-25

- Explore Energy Seminar: Launch: CEE 108B, CEE 208B, ENERGY 108B, ENERGY 208B (Win)
- Explore Energy Seminar: Navigate: CEE 108A, CEE 208A, ENERGY 108A, ENERGY 208A (Aut)
- Explore Energy Seminar: Propel: CEE 108X, CEE 208X, ENERGY 108X, ENERGY 208X (Spr)
- Living Laboratory for Sustainability at Stanford: SUSTAIN 119, SUSTAIN 219 (Spr)
- Quest for an Inclusive Clean Energy Economy: CEE 130B, CEE 330B, EARTHSYS 130B, EARTHSYS 330B (Win)
- Spatial Planning for Gigascale Renewables & Transmission: CEE 176M, CEE 276M, EARTHSYS 176M, EARTHSYS 276M (Spr)

2023-24

- Energy Equity Policy Lab: Spatial Planning for Renewables: SUSTAIN 210M (Spr)
- Explore Energy: CEE 108, CEE 208, ENERGY 108, ENERGY 208 (Aut, Win, Spr)
- Quest for an Inclusive Clean Energy Economy: CEE 130B, CEE 330B, EARTHSYS 130B, EARTHSYS 330B (Win)

2022-23

- E^3: Extreme Energy Efficiency: CEE 107R, CEE 207R (Win, Spr)
- Explore Energy: CEE 108, CEE 208, ENERGY 108, ENERGY 208 (Aut, Win, Spr)
- Justice 40 Policy Lab: SUSTAIN 210 (Aut, Spr)
- Quest for an Inclusive Clean Energy Economy: CEE 130B, CEE 330B (Win)

Publications

PUBLICATIONS

- **Inside the Black Box: Understanding key drivers of global emission scenarios** *ENVIRONMENTAL MODELLING & SOFTWARE*
  Koomey, J., Schmidt, Z., Hummel, H., Weyant, J.
  2019; 111: 268–81
- **Interpreting Global Energy and Emission Scenarios: Methods for Understanding and Communicating Policy Insights**
  Hummel, H.
  Interdisciplinary Program in Environment and Resources, Stanford University. Stanford, California.
  2006 ; Dissertation