Joachim Kreuzberg, executive board chair and CEO Sartorius AG
Otto-Brenner-Strasse 20
37079 Göttingen Germany

Dear Dr. Kreuzberg:

As residents of the Ann Arbor, Michigan (U.S.) area, we're pleased that Sartorius selected our city as the future site of its Center of Excellence for Bioanalytics. Your presence here will add good jobs, revitalize an industrial park, and enhance our standing as a center for biomedical innovation. We are also aware of Sartorius's corporate sustainability goals. The LEED gold certification for your first building shows your commitment to sustainable construction.

So we were surprised and dismayed that the company chose to heat that first building with gas, instead of choosing a ground or air source heat pump solution. We understand the stringent air exchange requirements of your process development laboratory and other building compartments that employ fume hoods, and the need for reliable, continuous heating or cooling of building air in these spaces. Gas can certainly accomplish this. But from a sustainability point of view, it's unacceptable to lock in new fossil fuel infrastructure for decades to come. This also runs counter to our city's A2ZERO climate action plan, which assumes all-electric and net zero energy new construction going forward.

While it's too late for the first building, we urge you to adopt an all-electric solution for your second one. All-electric buildings with laboratory, medical research and bioprocess engineering uses are now being built elsewhere, enabled by improvements in heat pump technology and by a number of innovations for reducing fume hood operation, including variable air ventilation (VAV), the use of Venturi valves, computerized systems to put fume hoods into hibernation mode when not in use, and other advances. In addition, an even more energy-efficient building that meets the Passive House standard of 0.6 ACH (air changes per hour) would further reduce energy demand.

Your local mechanical engineering consultant ruled out a geothermal system for the first building because of the risk of ground thermal degradation over time, and possible system failure. We're confident that you can engineer a system to avoid this issue, as others have.

As you know, there is a bill now before the Bundestag to ban most oil and gas heating installations in Germany starting in 2024. Sartorius can set an example for the U.S. by showing that compliance with such a law is also possible here, even for a large energy-intensive industrial building.

We know that you will be offsetting your local gas combustion emissions through the local utility, DTE Energy, and its MIGreenPower program. This is not an optimal solution, as any new renewable energy does not necessarily translate into reduced emissions, and the program pricing reflects legacy fossil fuel generation as well as new renewables. Instead of offsetting your Scope 1 emissions, it would be far better to avoid them altogether. By doing so, we believe that your second building could be a model for future buildings of this type in our area, and nationally.

Respectfully,

[List of signers follows]

Peter Allen (co-founder and board president, The Equitable Ann Arbor Land Trust)

Wayne Appleyard (former chair, Ann Arbor Energy Commission)

Lynda Asher

Mike Berkowitz

Lee Berry

Dan Ezekiel (Washtenaw County Parks & Recreation Commission)

Rich Fein

Susan Fancy (board member, Carbon Zero Youth Initiative)

Ken Garber

Anne Glendon

Paul Glendon

James Graff

David Gurk

Gabriel Harp (member, Ann Arbor Energy Commission)

Chuck Hookham P.E. (Arbor Consultants, PC; former Ann Arbor Energy Commissioner)

Bentley Johnson (Federal Government Affairs Director, Michigan League of Conservation Voters)

Larry Junck, M.D.

Larry Kerber (Homeland Solar; former Ann Arbor Energy Commissioner)

Chris Lewis

John Loken

Sarah Lorenz (co-founder and board member, The Equitable Ann Arbor Land Trust)

Ember McCoy (PhD candidate, University of Michigan; former Ann Arbor Energy Commissioner)

Rita Mitchell (chair, Ann Arbor Environmental Commission)

John Mirsky, member and former chair, Ann Arbor Energy Commission

John Mouat

Jonathan Overpeck (professor, University of Michigan; member, Ann Arbor Energy Commission; member, State of Michigan Council on Climate Solutions)

Tom Porter

Lauren Sargent, PhD

Doug Selby

Larry Schmitt, PhD (co-founder and managing partner, The Inovo Group LLC)

Mike Shriberg

Lisa Snapp

Nancy Stoll

Suzanne Van Dam (Michigan League of Conservation Voters)

Jane Vogel

Nadine Wang

Susan Westhoff

**Greg Woodring** 

Jan Wright

## Contact:

Ken Garber, kengarber@prodigy.net. +1-734-741-0134. 28 Haverhill Ct, Ann Arbor, MI US 48105

cc: Lothar Kappich, chair of supervisory board

Reinhard Baumfalk, head of product development, LPS Division

Maurice Phelan, president, Sartorius North America

Laurent Claisse, senior vice president, operations

Pete Mertens, operations network strategic manager, Ann Arbor