

## Chief Investment Officer Letter to Managers

August 27, 2014

I write to discuss climate change and Yale's investment program. The Investments Office bases its approach to global warming on the conclusion that greenhouse gas emissions pose a grave threat to human existence. Climate change (caused by deforestation and emissions of carbon dioxide, methane and other gases) creates a substantial risk of significant changes to the world's ecosystem and from actions to address those changes, making consideration of the impact of climate change essential when evaluating investment opportunities.

Yale asks that when making investment decisions on the University's behalf, you assess the greenhouse gas footprint of prospective investments, the direct costs of the consequences of climate change on expected returns, and the costs of policies aimed at reducing greenhouse gas emissions on expected returns. Simply put, those investments with relatively small greenhouse gas footprints will be advantaged relative to those investments with relatively large greenhouse gas footprints.

A full accounting of the internal and external costs of greenhouse gas emissions will call into question the business models of some investments, which will require especially careful consideration. Today, examples include thermal coal producers, tar sands operations, companies that rely on cheap power from coal and low lying coastal real estate. Of course, the list of investments requiring special consideration will change along with changes in the population of investments with business models that rely on mispriced externalities.

Conversely, fully pricing the externalities created by greenhouse gas emissions will create opportunities for profit. Examples include companies that produce renewable energy and products that facilitate demand shifting or otherwise promote efficient use of energy.

With respect to the particular case of investments in corporate entities, as you consider the implications of climate change, Yale expects you to discuss with company managements the financial risks of climate change and the financial implications of current and prospective government policies to reduce greenhouse gas emissions. You should encourage managements to mitigate financial risks and to increase financial returns by reducing greenhouse gas emissions. Yale asks you to avoid companies that refuse to acknowledge the social and financial costs of climate change and that fail to take economically sensible steps to reduce greenhouse gas emissions.

Government policies addressing climate change will impose costs on many investments, especially those with relatively high greenhouse gas footprints. If countries around the world implement pricing schemes that reflect the true costs of greenhouse gas emissions and if in your investment decisions you properly account for the costs and risks

of greenhouse gas emissions, Yale's investments will be well positioned to deal with a more enlightened regulatory environment. On the other hand, even if governments adopt imperfect policies to control greenhouse gas emissions, the University's position will be protected by accounting for the financial impact of these policies on portfolio investments. Even in the absence of effective government policies to mitigate greenhouse gas emissions, your consideration of the costs and risks of climate change should lead you to better investment decisions.

Analyzing the greenhouse gas emissions associated with investments is far from simple and fraught with challenges. As in all aspects of investment analysis, decisions will be based on incomplete, imperfect information. That said, consideration of the risks associated with climate change should produce higher quality portfolios.

Please contact me with any questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read "D Swensen". The signature is fluid and cursive, with a large initial "D" and "S".

David Swensen  
Chief Investment Officer