

My name is Brad Morrison, and I am the Chair of the Selection Committee for the System Dynamics Applications Award.

This Award is presented by the Society as often as once a year for the best “real world” application of System Dynamics, based primarily on demonstrated measurable benefit through the use of System Dynamics,

Instructions for making nominations are on the Society website.

I would like to thank the other members of the committee: Jack Homer, Mark Paich, and especially Erik Zahn, who will be stepping down this year. THANK YOU also to those of you who made nominations. Keep those nominations coming.

Now for the good part: I am delighted to present the 2017 System Dynamics Applications Award to the “Threshold 21 Model for Long-Term National Development Planning,” work done by the Millennium Institute.

The authors and contributors we are recognizing, focusing on the recent years of this work, are, in alphabetical order Steven Arquitt, Carla Susana Agudelo Assuad, Melak Mesfin Ayenew, Gerald O. Barney, Santiago Movilla Blanco, David Collste, Hans R. Herren, Maximilian Kleemann, Matteo Pedercini, Weishuang Qu, John D. Shilling, and Gunda Zuellich

It gives me great pleasure to welcome to the stage two people at the very center of this work: the current President and CEO of the Millennium Institute Hans R. Herren and the Vice President, Chief Operating Officer Matteo Pedercini.

Threshold 21 (or T21 as it is often called) is a dynamic simulation tool that is used by key policy makers to do comprehensive, integrated long-term national development planning. It was developed over more than 20 years in consultation with the World Bank, UN agencies, developing country governments, and non-governmental organizations.

It began with Millennium Institute’s founder, Dr. Gerald Barney, in 1983 and has continued to date through partnering with a wide range of stakeholders for global, regional, and national development challenges.

This work is distinctive both for what they have done AND for how they have done it.

As for what they have done, in the past three decades, they have assisted more than 40 nations and regional groups to outline policies to achieve sustainable development goals. This has been done within a context of the United Nations Millennium Development goals (MDGs), which you will hear about momentarily, by customizing the model to applications in various countries.

To name just a few somewhat quickly, for Ghana, in areas of health, education, infrastructure, and agriculture.

In Mali in poverty, deforestation and desertification, and the cotton and gold mining industries.

In Mozambique, setting out the path to national development, known as Agenda 2025, that was unanimously approved by the Mozambican Parliament.

In Jamaica, to transform their Medium Term Socio-economic Framework (MTSEF) into a quantitative model and develop a broadly- owned comprehensive national development plan.

In China, commissioned by the WWF, to examine ways to reduce greenhouse gas emissions from the cement and iron and steel industries and also to inform the United Nations Framework Convention on Climate Change (UNFCCC) negotiations

In Denmark, to explore wind, hydrogen and biomass renewable energy projects.

And in addition a whole series of applications of the model in their Climate Change Studies program.

Through this work, they also showed that a model built for the developing world, focused on the UN's MDGs, could also be usefully applied to the developed world, which included a model for the US that ended up generating useful conclusions about energy policy

Twelve customized versions of the T21 model are available, fully transparent and documented, on their website.

But perhaps even more important is how they do this work.

Their approach is stakeholder-led, relying on active collaboration with and participation from the local stakeholders. They work with top-level ministers in all of their client countries. And, they have worked with, and been open to, the ideas of lots of good outside SD people over the years, many of whom are in the audience here today. I hesitate to name any because I might leave some out. .

It is clear that with every new application of T21, they sought and continue to seek to make improvements, not just to churn out the same thing for every client.

The results of this approach are nothing short of fantastic. They have collaborated with many country governments and international organizations to support their sustainable development planning efforts. They have trained hundreds of government officials in system dynamics, and run SD courses in various universities in developing countries. And, perhaps most importantly,

they have contributed to the penetration of system dynamics in the development field, where it is now becoming more broadly accepted.

So like much really great SD work, it is not just about a model or the answers a model may have to offer but also that it has fundamentally helped to build a system thinking and system dynamics capability in the client organization. The work has helped the policy makers become better thinkers, equipping them to consider a dynamic perspective on problems, improving their mental models, and making them better able to make decisions on a day-to-day basis, even when they don't have access to a formal model. For all these reasons, this work is absolutely phenomenal.

So, Hans and Matteo, it is clear that your work has made, and will continue to make, a powerful impact throughout the world.

Let me just say to everyone out there, if you are not familiar with this work, check it out. It's awesome!

Please accept my personal congratulations. I have a deep admiration for this work. And, on behalf of the System Dynamics Society, I also congratulate you, and I'd like to invite you to tell us a little more about your work.