

# 2021 SAS Climate Risk Dialogue Virtual Series “Climate Focus for Actuaries”

## Afternoon Forum Series : 18<sup>th</sup> & 25<sup>th</sup> June 2021

CPD 4 Hours

### Role of Actuaries in Climate Risk (18<sup>th</sup> June)



Elayne Grace  
CEO, Actuaries  
Institute



Tan Suee Chieh  
President, IFoA



William Song  
Chief Risk Officer  
MSIG Asia



Michael Eves  
Appointed Actuary  
Swiss Re Asia Ltd



Prof Benjamin Horton  
Director, Earth  
Observatory Singapore



Davy Dao,  
SAS Climate Risk



Paul Wee, Chair SAS  
ERM Committee

Day 1: Addressing the strategic challenges of climate change for the actuarial profession (in Singapore).

Starting with presentations on rising sea-levels and the SAS efforts, the panel session will discuss the evolving role of actuaries in climate risk in context of the Vision, Skillsets, Mindsets and Domains philosophy. There will be sharing of the Australia experience, with discussion on partnerships with academics and thinking on climate insurability and climate tipping points.

### Climate-Related Stress Testing for Actuaries (25<sup>th</sup> June)



Nick Spencer  
Chair, IFoA  
Sustainability Board



Rade Musulin  
Principal, Finity  
Consulting



Ng Cheng Wei  
Deputy Director, Monetary  
Authority Singapore



Prof Winston Chow  
Professor SMU  
Lead Author, IPCC



Adrian Goh  
Head of ERM  
Munich Re Asia



William Song  
Chief Risk Officer  
MSIG Asia



Paul Wee, Chair SAS  
ERM Committee



Eileen Tay,  
Regional Risk  
Manager, DLI Asia

Day 2: Addressing practical challenges facing actuaries, with presentations on climate risk from MAS, insights on urban vulnerability, and insights from the IFoA on how a long-run sustainable driven plan should look like.

The panel session would discuss these practical issues in approaching scenario development and stress testing, and issues arising from ongoing ESG stress testing consultations in Singapore, the IAA and industry developments such as the Green Finance Industry Taskforce GFIT.

## 2021 SAS Climate Risk Dialogue Virtual Series: Agenda

### Afternoon Forum Series : 18<sup>th</sup> & 25<sup>th</sup> June 2021

#### Role of Actuaries in Climate Risk (Friday 18<sup>th</sup> June)

**4:00pm:** Opening by SAS, Paul Wee (Climate risk) & Davy Dao (SAS Climate Index)

**4:20pm:** Rising sea levels, Prof Benjamin Horton

**4:50pm:** Panel on Role of Actuaries in Climate Risk

Tan Suee Chieh  
*President, IFoA*

Elayne Grace  
*CEO, Actuaries Institute*

Michael Eves  
Prof Benjamin Horton

William Song  
Paul Wee (Moderator)

**6:00pm:** Closing

*Chatham House Rules to apply  
Timings in Singapore time*

#### Climate-Related Stress Testing for Actuaries (Friday 25<sup>th</sup> June )

**4:00pm:** MAS on Climate Risk, Ng Cheng Wei

**4:30pm:** Urban Vulnerability, Prof Winston Chow

**5:00pm:** “Postcards for Actuaries: Is your Long-Run a Sustainable Destination?” Nick Spencer

**5.30pm:** Panel on Climate-Related Stress Testing for Actuaries

Rade Musulin

Prof Winston Chow

Ng Cheng Wei

Nick Spencer

Adrian Goh

William Song

Eileen Tay (Moderator)

**6:15pm:** Closing

# Participant Profiles



**Tan Suee Chieh**

Tan Suee Chieh is the President of the Institute and Faculty of Actuaries and a member of the Presidential Team (June 2019 to June 2022). He also sits on the boards of Singapore University of Social Sciences, Sim Kee Boon Institute of Financial Economics (SMU), LSE Trust (Singapore), Singapore School of the Arts and various boards of the Institute and Faculty of Actuaries (UK). He was the Group Chief Executive at NTUC Enterprise from October 2013 to February 2017. Enterprise is the holding entity of the NTUC social enterprises (cooperatives). The group has businesses in: Retail; Food & Beverage; Financial Services; Education & Training services; Eldercare services and Property. From 2007 to 2013, Suee Chieh was the Chief Executive of NTUC Income, a composite cooperative insurer and one of the largest insurance businesses in the Singapore market. Between 2003 and 2007, he was President, Asia Pacific of the SHL Group Ltd, a British HR consultancy firm and a world leader in objective assessment. From 1981 to 2001, Suee Chieh was with the Prudential Group and held several senior positions including Actuary of Prudential Malaysia, Chief Executive of Prudential Singapore and Regional Managing Director, Established Markets of Prudential Corporation Asia. Suee Chieh has a first class honours degree from the London School of Economics and a Masters degree from Columbia University, New York. He is a Past President of the Life Insurance Association of Singapore and the Actuarial Society of Malaysia.



**Elayne Grace**

Elayne Grace is the Chief Executive Officer of the Actuaries Institute. Previously as Head of Public Policy, she drove the development and implementation of the Institute's public policy strategy delivering major thought leadership papers and increasing external and media engagement. Papers dealt with serious societal issues such as mental health, big data, genetics, housing wealth, health, longevity risk and climate change. Having 25 years' international experience with leading consulting firms and major insurers, Elayne has provided strategic, economic and financial advice a range of issues. Elayne has contributed to Australian business climate change thought leadership papers, Geneva Papers, Intergovernmental Panel on Climate Change report, UNEP Finance CEO briefing papers and actuarial conference papers. She was a member of the Expert Advisory Panel to the Indigenous Land Corporation and participated in the Commonwealth Study Conference and Chief Executive Women's Leadership Program. Elayne is a graduate of the Australian Institute of Company Directors, a Fellow of the Institute of Actuaries of Australia and of the Institute and Faculty of Actuaries. Elayne was named in the Australian Financial Review's *100 Women of Influence* in the public policy category in 2019.



**Nick Spencer**

Nick Spencer is a sustainable investment strategist. He founded Gordian Advice which helps UK Pension Funds integrate responsible investment into their investment strategies and portfolios. Gordian Advice currently works with a range of corporate DB, LGPS and DC clients who are responsible for £80bn in assets. Nick is Chair of the IFoA's Sustainability Board and was co-chair of the IFoA's climate-related risks taskforce. He recently co-authored a paper on "[Climate scenario analysis - An illustration of potential long-term economic & financial market impacts](#)" as well as the DCIF Good Citizen's Guide to ESG. Nick is a founding member of [Actuaries for Transformational Change](#), and a member of the Biodiversity Working Party. Nick is a passionate believer in the importance of values and culture and an advocate for aligning the asset management industry with a broader societal purpose. He was Co-Chair of Russell Investments' EMEA Diversity & Inclusion Committee and is an Ambassador for the [Diversity Project](#).

# Participant Profiles



**Rade Musulin**

Rade Musulin is a Principal at Finity Consulting in Sydney, Australia, where he leads the Climate Risk practice. Previously he served as the Chief Executive Officer of FBAlliance Insurance, Chief Operating Officer of Aon Benfield Analytics Asia Pacific, and Vice President Operations, Public Affairs, and Reinsurance for the Florida Farm Bureau Insurance Companies.

Rade serves as Convenor of the Actuaries Institute of Australia Climate Change Working Group, Vice-Chair of the International Actuarial Association's Resource and Environment Forum, and was Vice President – Casualty for the American Academy of Actuaries from 2016 – 2018.

His main areas of interest include how changing population demographics affect catastrophe exposure, climate change adaptation, applications of catastrophe models for disaster planning in developing countries, building code development, and community resilience. Rade has maintained close ties with academic institutions, including being a lecturer for undergraduate classes in actuarial science, risk management, and political science.



**Ng Cheng Wei**

Ng Cheng Wei is a deputy director in the Insurance Department of MAS. He is leading a team that is supervising general insurers and reinsurers. He has been with MAS for more than ten years.

Prior to his role in MAS, Cheng Wei has worked in the actuarial departments of various life insurers in Singapore.

Cheng Wei is a Fellow of the Institute of Actuaries.



**Michael Eves**

Michael Eves is currently the certifying actuary for Swiss Re Asia Ltd and a Director of Swiss Re Australia L&H. He was previously Group Chief Actuary of Swiss Re based in Zurich and has held director positions in Swiss Re Europe, Reassure UK and Pensions Insurance Group. For the actuarial profession he was an active member of the IAA for over 10 years including a period serving as the Vice-Chair of the Insurance Regulation Committee.



# Participant Profiles



**Benjamin Horton**

Professor Benjamin Horton is the Director of the Earth Observatory of Singapore at Nanyang Technological University (NTU). Prior to joining NTU, Professor Horton was Professor at Rutgers University and Associate Professor at the University of Pennsylvania. Professor Horton obtained his PhD from the University of Durham, UK.

Professor Horton has won several awards in his career –Professor Horton has published over 220 articles in peer-reviewed journals, including 29 articles in high profile journals such as *Science*, *Nature* and *Proceedings of the National Academy of Sciences*. Professor Horton is supervising or has supervised 26 students to the degree of PhD and 22 postdoctoral scientists, of which 17 now have permanent academic positions.

Professor Horton’s research concerns sea-level change, with the aim of understanding and integrating the external and internal mechanisms that have determined sea-level changes in the past, and which will shape such changes in the future. His research impacts upon important ecological, ethical, social, economic and political problems specifically facing coastal regions.



**Winston Chow**

Dr Winston Chow is an Associate Professor of Science, Technology and Society at Singapore Management University’s (SMU) School of Social Sciences and Office of Core Curriculum. He is an urban climatologist currently researching on urban vulnerability to climate change, as well as on urban heat island science, adaptation and mitigation. Over the past fifteen years, he has written more than fifty research papers, book chapters, and commentaries on urban climate and climate change, in addition to regularly speaking on these topics at more than sixty public talks, film documentaries, and audio podcasts. Dr Chow is a Principal Investigator for the ongoing Cooling Singapore initiative (<https://www.coolingsingapore.sg/>), and is a Lead Author for the Intergovernmental Panel on Climate Change’s (IPCC) Sixth Assessment Report chapter on “Cities, Settlements and Key Infrastructure” due in 2022. He is an Associate Editor for the academic journal *Climate Risk Management*, and also tweets sporadically on many topics.



**William Song**

William Song is the Chief Risk Officer of MSIG Asia, based in Singapore. William joined MSIG in 2010 and he specialises in non-life insurance risk management with focus on creating and protecting enterprise value through analytical risk optimisation.

Prior to joining MSIG, William was a consultant with Watson Wyatt, now called Willis Towers Watson. William has over twenty years of insurance experience from different insurance markets in Asia-Pacific, including Australia, South Korea and South East Asian countries.

William is a Fellow of the Institute of Actuaries of Australia and he graduated with a Master of Business Administration from the University of Chicago Booth School of Business.

# Participant Profiles



**Adrian Goh**

Adrian Goh is the Head of Enterprise Risk Management for Munich Re, APAC. He is an experienced risk officer who previously served in life and non-life insurers in the Singapore insurance industry.



**Eileen Tay**

Eileen Tay is Regional Risk Manager with Dai-ichi Life Insurance's Asia Pacific Regional Headquarters. She is responsible for the oversight of financial risk management for local business units and enterprise risk management for Myanmar subsidiary. As a Fellow of the Institute and Faculty of Actuaries (UK), Eileen has a keen interest in sustainability and works closely with the Singapore Actuarial Society and International Actuarial Association on developing sustainability initiatives.



**Davy Dao**

Davy Dao is a Fellow of the Institut des Actuaire France. He previously worked in France and New Zealand on the sustainability theme especially on a climate change index specific to the insurance industry. After joining the Singapore Actuarial Society, Davy has a keen interest in developing a similar index in collaboration with people from diverse backgrounds.



**Paul Wee**

Paul Wee is the Director of GI Products and Underwriting in digital insurer Bolttech and a qualified actuary, responsible for pricing, underwriting and reinsurance in the new markets. He has 18 years P&C actuarial experience across pricing, reserving and risk management in reinsurance and direct insurance firms, where prior to Bolttech was recently from Swiss Re. He is the Chair of the SAS ERM Committee addressing topics such as on cyber, climate risk and digitalisation, and a member of the Climate Risk Task Force in the IAA. Paul is a Fellow of the Institute & Faculty of Actuaries UK.