



Science, Technology & Innovation for
the Sustainable Development Goals

Multi-stakeholder Forum on Science, Technology and Innovation for the SDGs

New York, 5-6 June 2018

Concept note for

***Special Event: Roundtable of STI Funders and Innovators ---- “Impact Investing: Levering Frontier
Technology to Deliver Prosperity to the Last Mile”***

Conference Room 7, UN Headquarters New York, 6 June 2018, 13:15 - 14:30 pm

Sponsored by the International Academic Forum (IAFOR)

1. Background

The first meeting of the Multi-stakeholder Forum on Science, Technology and Innovation for the SDGs (“STI Forum”) in 2016 highlighted an existing gap between innovations that have the potential to serve the poor and contribute towards achieving the Sustainable Development Goals (SDGs) and the support to ensure their adoption at scale. To close that gap, the Forum suggested expanding participation to include the financial sector, especially providers of early-stage finance, who could be matched with participating innovators, as well as to include discussions around policy measures to support such scaling up.

Impact investing has been identified as a potential key source of financing these innovations. “*Impact investments*” are investments made into companies, organizations, and funds with the intention to generate social and environmental impact alongside a financial return. This allows investors to use their funds in goodwill to address global challenges to sustainable development, while also receiving a return on investment. Estimates based on industry survey suggest that over US\$ 77.4 billion of impact investment assets were managed in 2015. Demand for impact investment continued to grow – from US\$ 15.2 billion in new investment commitments in 2015 to USD 17.7 billion in 2016. According to [The Global Sustainable Investment Alliance](#) (GSIA) 2016 report: sustainable “ESG Integration” – investing that integrates Environment, Social and Governance criteria into investments decisions – has soared in 2016 to \$10.37 trillion globally, and is growing annually at 25%. The growth rate of impact and sustainable investing is faster than any other area of professionally managed assets worldwide. [SEE: http://www.gsi-alliance.org/wp-content/uploads/2017/03/GSIR_Review2016.F.pdf]. The Frontier Technology market of blockchain and digital assets is estimated to reach \$1trillion in 2018: the

opportunity is to lever both markets together to accelerate capital and large-scale solutions delivery of the Sustainable Development Goals.

Now, for the first time in history we stand at the edge of a dual phase shift from the 4th Industrial Revolution where the lines between technology and humanity are blurred and the 5th Industrial Revolution where a new “Internet of Value” is being formed worldwide. The emerging Internet of Value integrates the vast power of frontier technology across blockchain and inclusive digital assets with market capacity of impact investing and large-scale systems solutions for last mile prosperity. Together this new frontier will enable us to produce a full paradigm change in delivering last mile connectivity, prosperity and engagement in a new, values based and decentralized global economy grown from trust, truth, transparency and dignified inclusion. This event is designed as a solutions event to bring together some of the world’s foremost capital providers and technology pioneers that are delivering the exponential impact that will realize the 5th Industrial Revolution.

2. Objectives - expected outcomes and key messages

The main objective of the event is to discuss how to lever the frontier technology, including by women and youth, to deliver impact investing and last mile prosperity for all. Consideration will be given to ways to develop and pilot technological solutions for the SDGs, and to support the enabling policies that may be needed for taking these to scale, particularly through impact investing.

The event will bring together innovators and entrepreneurs, those interested in financing solutions with positive impact for sustainable development, and those who develop policies to foster the scale up of STI for SDGs. Representatives from the finance industry, foundations, institutional and individual investors, investment professionals, development finance institutions, policy makers and civil society will be invited to attend.

3. Format and/or scenario of the event

Ambassador Toshiya Hoshino, the co-chair of STI Forum will open the meeting and welcome the participants. The event will be structured as a moderated panel discussion, followed by questions and answers and an interactive plenary discussion between panelists and featured innovators (see Annex 1). The event will close with a brief presentation of main outcomes of the discussion by the moderator.

Suggested speakers:

Includes a selection of the world’s foremost pioneers and pathfinders that are leading a new frontier in impact investing and emerging technology to deliver integrated and systemic solutions to last mile prosperity globally; and institutional finance and impact investing leaders who are the vanguard of building capital infrastructure and mobilizing mainstream markets and capital at scale to transform the world’s sustainability and prosperity needs across developed and least developed regions worldwide.

- Dr. Aliyu Abbati Abdulhameed - Managing Director, Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL).
- Alfa Demmellash - Co-founder and CEO, Rising Tide Capital
- William Doll - Founding Partner, Syneidesis
- Dr. Fan Gao - Senior Vice President and Overseas Compliance Director, CreditEase China
- Pamela Jacobs - Executive Managing Director, Impact Investing - Investnet, Inc
- Vincent Molinari - Co-Founder Liquid Markets Group; Co-Founder, Templum; Chair, Fifth Element Fund; Co-Founder, 5th Element Group
- Todd Morley - Founder & Chairman, G2 Investment Group, Co-founder, Y2X
- Janet C. Salazar - CEO & Co-founder, IMPACT Leadership 21
- Abdul Haseeb Basit - Co-founder and Principal, Elipses
- Masaya Mori, Global Head of Rakuten Institute of Technology
- Masahiko Honma, Founder and General Partner, Incubate Fund

Co-Moderators:

- **Dr Joseph Haldane** - Chairman and CEO, The International Academic Forum (IAFOR) & Guest Professor, The Osaka School of International Public Policy, Osaka University, Japan
- **Amber Nystrom** - Co-Founding Principal, 5th Element Group; Co-Founder & CEO, 5th Element Fund; Chair, Blockchain Commission on Sustainable Development and Blockchain for Impact, Special Office for Gender Equality and Equity.

4. Questions for discussion

The discussion will be guided by the following questions:

- How to make technology solutions “ready” for impact investing?
- How can we better build digital competencies to benefit from existing and emerging technologies, with special focus on gender and youth dimensions?
- How can blockchain and inclusive digital assets bring large scale solutions for last mile prosperity?
- What are the main challenges for developing, adopting, disseminating or scaling STI solutions?
- What are the main obstacles to scaling-up the commercial deployment of technologies for SDGs?
- What kind of financial instruments, investment funds and funding platforms are needed to stimulate institutional and other investors to finance featured innovations and emerging technologies for SDGs?
- What are the effective UN frameworks and mechanisms for engaging with such private sector initiatives?
- Can the UN add value to such efforts?
- What are your top three recommendations for action by the United Nations system, governments, businesses and civil society?

5. Supporting documents/publications

- Outcomes of the Global Solutions Summit 2016¹
- Outcomes of the Global Solutions Summit 2017²
- Financial Time's Innovative Finance as a Force for Global Change Event³

As with the other event and events of the Forum, key messages emerging from the event will feed into the Co-Chair's Summary of the Forum.

Annex 1: Featured Innovators⁴

Innovator/Company name	Website	Country	Description
Keneth Ndua/ Jiko Raha	https://go.globalinnovatyonexchange.org/innovation/jiko-raha	Kenya	Jiko Raha (charcoal and briquettes) – a fuel-efficient biomass stoves featuring an innovative in built jacket that can be filled with 3 liters of water that enables the user to simultaneously boil water thus sanitizing it whilst cooking enabling households have safe drinking water free of disease causing micro-organisms. This feature both helps to insulate the stove and makes it more efficient.
Lorraine Potter / Land for Life: Inga Alley-Cropping for Sustainability/ Food Security/Saving Rainforests	https://go.globalinnovatyonexchange.org/innovation/land-for-life-inga-alley-cropping-for-sustainability-food-security-saving-rainforests	US/ Nicaragua, Honduras, Guatemala, Costa Rica and Belize	Our solution is custom tailored for Haiti's social and environmental landscape. It adds value to waste (thus incentivizing pickup), produces affordable biofertilizer for Haitian farmers, produces biogas for electricity, reduces health and environmental waste hazards and has an overall immensely positive environmental and health impacts for Haiti.
Sydney Sgray / Maji Mamas: Women Building Scaleable Water Construction Microfranchises	https://go.globalinnovatyonexchange.org/innovation/maji-mamas-women-building-scaleable-water-microfranchises	US/	Maji Mamas use interlocking stabilized soil block technology to build environmentally sustainable tanks for their community at less than half the cost of the cheapest competitors on the market, increasing her income while bringing water management solutions to her community. As a microfranchise, Maji Mamas receive training in business, leadership, and critical WaSH issues to build and expand on a scaleable plan,

¹ <http://www.globalsolutionssummit.com/>

² <http://www.globalsolutionssummit.com/>

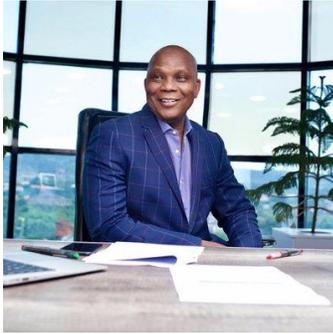
³ <https://live.ft.com/Events/2016/FT-Investing-for-Good-2016>

⁴ See <https://sustainabledevelopment.un.org/TFM/STIForum2018/CallforInnovations>

			increasing her income by up to 300%.
Ocupa Tu Calle	https://go.globalinnovati.onexchange.org/innovation/ocupa-tu-calle	Peru	We reduce inequality on access to quality public spaces through the recovery of unused and abandoned public spaces by the promotion of small scale and low cost urban interventions. Additionally, we promote collaborative work between local governments, academic institutions, private sector and civil society; we generate knowledge to empower citizens and we advise and accompany municipalities so they include urban interventions as public policy.
PetaBencana	https://go.globalinnovati.onexchange.org/innovation/petabencana-id	Indonesia	PetaBencana.id is a free web-based platform that produces megacity-scale visualizations of disasters in Indonesia using both crowdsourced reporting & government agency validations in real time. By democratizing decision support, the platform increases the safety and resilience of cities through greater inclusivity.
Ben Jeffreys / ATEC* Biodigesters International	https://go.globalinnovati.onexchange.org/innovation/atec-biodigesters-international	Australia	ATEC* produces, sells and distributes the first commercially scalable biodigester in SE Asia. 600 units have been sold, providing gas for cooking, 20 tons of organic fertilizer/year, and US\$5,850 household savings over its lifetime.
Dr. Sunil Dhole/ Non-Electric, Sustainable, Effortless to Maintain and Low Cost - Community & Household Drinking Water Systems	https://go.globalinnovati.onexchange.org/innovation/non-electric-drinking-water-systems	India	Our system based on specialty polymer invented by us removes Virus, Bacteria, Turbidity, Pathogens & Iron without any chemical treatment. Our systems do not need any energy source or electricity to purify water. It has long life & can be maintained by any layman. Also no wastage of water during purification. System doesn't remove minerals from source water & can be used for small household to entire village. Cost per litre is 4 paisa to 10 paisa (.0015 USD) depending on the size

Dexter Gauntlett / SweetSense Remote Water Monitoring Platform For Improved Water Service Delivery, Accountability, and Health	https://go.globalinnovationexchange.org/innovation/sweetsense		SweetSense Inc. creates Internet of Things (IOT) solutions to improve the quality and value of water, sanitation, and energy services in emerging markets. Our groundwater monitoring solution indicates runtime of each groundwater extraction pump. The sensors report daily over satellite or cellular networks to a central dashboard accessed by water service providers who can monitor functionality and water volume, thereby enabling greater service and accountability.
Santosh Poudel / City Based Common Hospital Waste Treatment facility	https://go.globalinnovationexchange.org/innovation/common-hospital-waste-treatment-facility	Nepal	Installation of individual treatment facilities by small healthcare units requires complex/high level management and comparatively high capital investment. Waste Service came with the complete solution of the bio medical waste prioritizing the health and environment focusing in non-burn technology with city based common treatment facility. Thus, a common treatment facility seems to be the only cost effective, Eco friendly, practicable and benchmark to enforce waste management rules and regulation.
Gerald Perry Marin/ FoPo Food Powder		Philippines	

Annex II: Biographies for STI Funders/impact investors:



Dr. Aliyu Abbati Abdulhameed - Managing Director, Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL)

Dr. Aliyu Abbati Abdulhameed is the Managing Director of the Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL). Mr. Abdulhameed holds a B.Sc. in Agricultural Economics and Rural Sociology from Ahmadu Bello University, Zaria, a Master's Degree in Public Administration with specialization in Public Policy, and an Executive Masters Certificate in Project Management from the Project Management College (UK).

Currently as an Executive Team Member of NIRSAL Plc, he has over 22 years' experience in corporate agribusiness, and in the field of Agricultural Finance and Risk Management. NIRSAL, a Public Limited Liability Company licensed as a Non-Bank Financial Institution (NBFI), is an initiative of the Central Bank of Nigeria (CBN), the Banker's Committee (BC) and the Federal Ministry of Agriculture and Rural Development (FMARD).

With the primary mandate of facilitating the flow of credit to agribusiness value chain players, and collaborating with stakeholders to fix broken agricultural value chains in Nigeria, NIRSAL promotes economic development by acting as a catalyst for credit flows to agricultural value chains, by systematically addressing key failures in the agribusiness supply chains. He was to re-focus NIRSAL and help de-risk agricultural lending in Nigeria, asserting that it would help move the country towards food sufficiency, job creation, and inclusive growth.



Abdul Haseeb Basit - Co-Founder and Principal, Elipses

Abdul Haseeb is a Co-Founder and Principal of Elipses, a research, advisory and investment firm. He is also the Non-Executive Chairman of Yielders, a UK Islamic FinTech marketplace for alternative asset classes. He is the former CFO of Innovate Finance, the UK not-for-profit FinTech members association. Abdul Haseeb previously worked in technology transformation and strategy at Credit Suisse in the private wealth and asset management division. He has over 15 years experience working at

the intersection of finance, technology and strategy. He is also a champion of Islamic Finance and transformative impact of technology to the industry. Abdul Haseeb is a qualified management accountant and has an MBA (with distinction) from Imperial College Business School.



Alfa Demmellash - Co-founder and CEO, Rising Tide Capital

Alfa Demmellash is the co-founder and CEO of Rising Tide Capital, a nonprofit that supports under-served entrepreneurs in low income urban communities to start and grow successful businesses. In 2012, Alfa was recognized as one of Forbes' Most Powerful Women Changing the World. In 2010, Alfa was awarded honorary doctorate from St. Peter's University and New Jersey City University. In 2009, Alfa was profiled as a CNN Hero, and recognized by President Barack Obama during a speech at the White House. Alfa currently serves on the boards of St. Peter's University and BALLE. Born and raised in

Ethiopia, Alfa came to the U.S. at age 12 with a keen interest in poverty alleviation and conflict resolution.



William Doll - Founding Partner, The Syneidesis Group

William Doll is the founding partner of The Syneidesis Group, a community of investors who seek a deeper understanding of the trends (including sustainable) affecting our world. Syneidesis is an invitation-only association of CIO's and Senior Investment Officers who oversee global portfolios of at least USD 1B AUM. Interestingly, some of his previous work included collaborating with Emmy Award winning verity filmmaker Slawomir Grunberg.

William was one of five global sales directors at a global events company that produces over 90 C-level summits worldwide each year. William was the first salesman to reach director position in under 3 years and to manage the biggest number of Fortune 500 accounts globally. William was responsible for all revenue generation for the company's largest office in NYC, overseeing a team of 70.



Dr. Fan Gao - Senior Vice President and Overseas Compliance Director, CreditEase in China

Dr. Fan Gao was previously the Global Head of Operational Risk for Citi Private Bank and the Regional Head of Operational Risk for Asia Pacific at Citi. Her responsibilities covered consumer banking, commercial banking, investment banking, Global Transaction Service, private bank/wealth management and all Global Functions in 19 Asia Pacific countries for Citi. She is a life cycle consumer credit risk manager, Senior Credit Officer with 13 years of experiences. Dr Fan Gao has extensive experiences working with regulators, including OCC, FDIC, Federal Reserve Board and different

regulatory agencies globally as well as experience managing large analytical group to come up with business solutions.



Dr Joseph Haldane - Chairman and CEO, The International Academic Forum (IAFOR), Guest Professor, The Osaka School of International Public Policy, Osaka University, Japan

Joseph Haldane is the Chairman and CEO of IAFOR. He is responsible for devising strategy, setting policies, forging institutional partnerships, implementing projects, and overseeing the organisation's business and academic operations, including research, publications and events.

Dr Haldane holds a PhD from the University of London in 19th-century French Studies, and has had full-time faculty positions at the University of Paris XII Paris-Est Créteil (France), Sciences Po Paris (France), and Nagoya University of Commerce and Business (Japan), as well as visiting positions at the French Press Institute in the University of Paris II Panthéon-Assas (France), The School of Journalism at Sciences Po Paris (France), and the School of Journalism at Moscow State University (Russia).

Dr Haldane's current research concentrates on post-war and contemporary politics and international affairs, and since 2015 he has been a Guest Professor at The Osaka School of International Public Policy (OSIPP) at Osaka University, where he teaches on the postgraduate Global Governance Course, and Co-Director of the OSIPP-IAFOR Research Centre, an interdisciplinary think tank situated within Osaka University.

He is also a Visiting Professor in the Faculty of Philology at the University of Belgrade, a Member of the International Advisory Council of the Department of Educational Foundations at the College of Education of the University of Hawaii at Manoa, and a Member of the World Economic Forum's Expert Network for Global Governance.

From 2012 to 2014, Dr Haldane served as Treasurer of the American Chamber of Commerce in Japan (Chubu Region) and he is currently a Trustee of the HOPE International Development Agency (Japan). He was elected a Fellow of the Royal Asiatic Society in 2012, and a Fellow of the Royal Society of Arts in 2015.



Masahiko Honma, Founder and General Partner, Incubate Fund

Masahiko Honma is co-founder and general partner of Incubate Fund, the largest seed stage venture capital fund in Japan, having the operations in Tokyo, Singapore, and Bangalore. Incubate Fund has been investing over 200 startups to date, and the firm is managing US\$300M now, backed by seasonal LPs like Tencent, Yahoo, LINE, SEGA, Mixi, Mitsui Sumitomo Bank, and Japan's government fund. Masahiko is based in Singapore.



Pamela Jacobs - Executive Managing Director of Impact Investing, Envestnet

Pamela Jacobs has extensive domestic and international experience in the wealth management industry. Her tenure has been marked by leadership in creating and implementing solutions that address the evolving needs of wealth management providers and their clients. Pamela is currently Executive Managing Director, Impact Investing at Envestnet, Inc. and a recognized leader in driving growth and innovation in the areas of impact investing, digital engagement, and wealth transfer. Prior to joining Envestnet as an executive, Pamela served as a long term consultant to the firm managing many strategic initiatives including building the impact platform and forming the digital advice strategy. She founded PFJ Consulting LLC in 2001 and worked with wealth managers and fintech companies to provide actionable advice on product development and distribution. Her clients included national RIAs, Multi-Family Offices, Broker Dealers, Nonprofits, TAMPS and Asset Managers. Ms Jacobs brings more than three decades of experience including leadership positions at SEI Investments, Fidelity Investments and Thompson Reuters. She holds a BS in Marketing from University of Maryland and serves on the board of the Moyer Foundation. Pamela founded Connected Women in 2003, a networking group for senior women in investment management.



Vincent Molinari - Co-Founder Liquid Markets Group; Co- Founder, Templum; Chair, Fifth Element Fund; Co-Founder, 5th Element Group

Vincent is a globally recognized thought leader on the modernization of securities law and the intersection of breakthrough innovation and technology solutions. He has been a leading advocate of Impact Investing, The JOBS Act and Digital Assets ('crypto' and BlockChain-based assets) as Securities. Current initiatives include a system of cross-platform vehicles to advance the UN Sustainable Goals (SDGs) and de-risk Moonshot solutions at the nexus of digital finance/assets, Impact investing and large-scale SDG solutions. Vince is a co-founder and board member of the UN Blockchain Commission for Sustainable Development and is CEO of LiquidM Capital, a FINRA-regulated alternative trading system creating secondary liquidity for private and unregistered securities instruments. He is also Co-Founder and Chair of Templum, the first fully integrated regulatory framework for the issuance and secondary trading of digital assets as Securities and is Founder and Chair of Impact Token, tokenized smart contract to unify very large pools of aligned global capital to deploy into inclusive finance and the fulfillment of the mandates of SDGs worldwide.



J. Todd Morley - Founder & Chairman, G2 Investment Group, Co-founder, Y2X

Most recently, J. Todd Morley co-founded Y2X, which combines information technologies with assets of human need. Mr. Morley is also Founder and Chairman of G2 Investment Group. In 1999, Mr. Morley co-founded investment firm Guggenheim Partners LLC, which has over \$300 billion assets under management. He served on the Guggenheim Board as well as on its Executive Committee. G2 was founded in 2009, when Mr. Morley identified an opportunity with several partners to build an investment group that creates and sustains profit for individuals, families and institutions. The firm acts on the principle that investments in basic "pillars" of human need – food, water, energy, shelter, health care, communication, education – often create asymmetrical return profiles, many of which act as a hedge against inflation. Mr. Morley is a Series A financier for Amplify, Hint Inc., and Blueline Grid and principal investor and architect of enterprises including Rising Holdings, MB Global Partners, i(x) Investments, Threat Pattern and Forbes Private Capital Group. From 2010-2014, Mr. Morley served as Chairman of Forbes Private Capital Group. Mr. Morley currently serves on the Board and the Investment Committee of Rising Holdings, a partnership with former Federal Reserve Governor, Nelson Rising, MB Global Partners, an international private investment group and i(x) Investments, an impact investing platform Mr. Morley co-founded.



Amber Nystrom - Co-Founding Principal, 5th Element Group; Co-Founder & CEO, 5th Element Fund; Chair, Blockchain Commission on Sustainable Development and Blockchain for Impact, Special Office for Gender Equality and Equity.

Amber is Co-Founder of 5th Element Group, a Public Benefit Company expanding the frontier of exponential impact at the nexus of alternative currencies and digital assets, impact investing and the UN Sustainable Development Goals (SDGs); and Co- Founder and CEO of 5th Element Fund, the first Donor Advised Fund (DAF) converting tax advantaged crypto/token and digital assets into moonshot solutions to meet the SDGs. Amber is among the world's foremost innovators of large-scale global systems change, and a leading pioneer in impact investing. She is credited with numerous industry first innovations across sustainable finance, global social venture incubation and global innovation ecosystems. She has shaped impact strategies for HNW/UHNW families and finance firms with over \$13.5 trillion in AUM, directing nearly \$200 billion of new capital into sustainability globally. Amber is a passionate mindfulness practitioner, and a highly respected Master Global Systems Change Designer and Facilitator; a Coach and Guide for the Heroes Journey; and is a dedicated advocate for a dignified, unified and decentralized future, with women and the feminine re-balancing the forefront of a flourishing future.

Janet C. Salazar - CEO & Co-founder of IMPACT Leadership 21



Janet C. Salazar is a social innovator, human potential activist, serial entrepreneur, international speaker, philanthropist and a global thinker. Her fascination and energy is focused on the intersection and convergence of technology, impact investment and philanthropy for social good. Janet is the Chief and Permanent Representative to the United Nations and Permanent Observer to the United Nations Economic and Social Council (ECOSOC) at Foundation for the Support of the United Nations (FSUN). Janet has held these positions for 12 years, as she continues to be a strong voice for Public-Private Partnerships inside the United Nations. Her commitment to influencing state leadership decisions to foster strong global multi-sector partnerships have led to many tangible collaborations with different Missions to the United Nations.

Janet is also widely known for bringing the business and private sector perspective inside the United Nations by convening global forums and dialogues around global issues in partnership with UN entities, UN Missions and Fortune 500 companies. She is the CEO and Co-Founder of IMPACT Leadership 21™, a global platform providing leadership solutions that drive change toward inclusive and sustainable economies. As a sought-after Public-Private Partnerships specialist in the global field, Janet is a senior chief advisor and confidential sounding board to a select number of international entities and CEOs in the technology, infrastructure development, human resources and impact investment space.