World Economic Forum
Annual Meeting 2019
Globalization 4.0: Shaping a Global Architecture in the Age of the Fourth Industrial Revolution

Davos-Klosters, Switzerland 22-25 January
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Thank you for participating in the Annual Meeting 2019, where we gained a deeper understanding of the challenges and opportunities in shaping future agendas and a stronger appreciation of why public-private collaboration is more vital than ever. Closer collaboration is needed for a raft of reasons: the unprecedented complexity of our global system; the accelerating speed of change caused by the ongoing Fourth Industrial Revolution; the insufficiency of our steering mechanism for global governance to deal with current challenges; and populist uprisings around the world driven by a broad-based urge to take back control of society.

If we ever lived in a unipolar world, that time is over. If there was ever a political system with absolute sovereignty, it no longer exists. We cannot escape from the reality of Globalization 4.0 through futile attempts to reinforce and restore the global system in its current form. It will take combined and coherent efforts to remodel and strengthen the elements of the system from the base, and to remove the distortions and imbalances among them.

The outcomes achieved at the Annual Meeting were due to a multistakeholder and systemic approach. This included work done by our Industry Governors and System Stewards, which produced action-oriented ideas and initiatives; as well as the many productive diplomatic dialogues on humanitarian issues and geopolitical crises.

However, we can only bring about positive change in our global system with the contribution of all stakeholders. In Davos, participants were deeply engaged in the sessions, initiatives and projects of our organization. Now, we must continue this work and forge ahead in multiple constructive steps. Whether you are active in our work on oceans, climate change, inclusive digital globalization or any other initiative: it is imperative to continue this work to achieve our common goals.

Most importantly, we need to acknowledge that our commitment to improve the state of the world is one we share with all people. Taking action should not rest solely on the shoulders of politicians. We saw an excellent example of this in 16-year old Greta Thunberg, a participant in the Annual Meeting. She did not wait for anyone to designate her a stakeholder and has inspired young people around the world as well as her fellow participants in Davos to join her cause for a more sustainable planet. We too should have the courage to take action. In this regard, the World Economic Forum stands ready to engage you with its platform for public-private cooperation and commitment to improving the state of the world.
Outcomes of the Annual Meeting

Shaping the global agenda

- Prime Minister Shinzo Abe of Japan used a special address to commit his country’s G20 chairmanship to launch an agenda for global data governance. Abe said that the process, dubbed the Osaka track, would work under the auspices of the World Trade Organization.

- A group of 70-plus countries confirmed intentions to commence WTO negotiations on trade-related aspects of e-commerce following a ministerial meeting on the margins of the Annual Meeting on Friday 25 January. Shortly before, members of the Forum’s business and civil society trade community issued a statement calling for a new digital trade deal that should be both ambitious and inclusive. The community urged governments to move forward with this agenda at the WTO to reduce costs and facilitate greater participation in the global digital economy.

- The leaders of Brazil, Colombia and Peru, along with the Foreign Minister of Canada, used a joint statement on Wednesday to offer their countries’ backing to Juan Guaidó, leader of Venezuela’s opposition-controlled parliament, after he had declared himself the country’s interim president. A day earlier, President Mario Abdo Benítez of Paraguay called on Guaidó to take action.

- Mohammad Ashraf Ghani, President of Afghanistan, used his participation in the Annual Meeting to commit his country to democracy. Ghani used his address to remind other participants that Afghanistan has passed 390 new laws since 2015 and significantly increased the number of women in politics.

- The President of Azerbaijan Ilham Aliyev and Prime Minister of Armenia Nikol Pashinyan used a meeting at the World Economic Forum to advance negotiations on the settlement of the Armenia-Azerbaijan Nagorno-Karabakh conflict.

- The UK government announced a five-year plan to tackle the global threat of antimicrobial resistance. The plan envisages containing and controlling AMR worldwide by 2040.

- The Forum continued multistakeholder diplomacy dialogues aimed at advancing peace efforts on other key global fault lines, including the Western Balkans and Syria. The Forum also convened a public-private community of leaders for a Special Dialogue on Israeli-Palestinian relations. With the help of Prime Minister Abiy Ahmed of Ethiopia, a diplomatic dialogue was held on the Horn of Africa.

- Discussions were also initiated on the Sahel, the Korean Peninsula, European-Russian relations and on a new development architecture for Africa-Europe engagement.

- Many of these conversations will be pursued and further advanced in our upcoming meeting at the Dead Sea, Jordan, on 6-7 April, which we have decided to turn into a global summit for peace and reconciliation.
New economy and society

• The Forum’s Closing the Skills Gap Initiative, launched in 2017 with a target to reskill or upskill 10 million workers by 2020, announced that it has already secured pledges for training more than 17 million people globally, 6.4 million of whom have already been reskilled. The Forum also announced that the initiative is now supporting public-private partnerships aimed at promoting future skills in four countries: Argentina, India, Oman and South Africa.

• The Forum’s Centre for Global Public Goods helped launch a $15 million project to start a formal electronic waste recycling industry in Nigeria. The amount of e-waste generated each year is set to more than double by 2050 and already is a major environmental hazard as well as a health risk for millions of people working and living close to waste sites. The scheme is backed by $2 million in funding from the Global Environment Facility, which will be leveraged by $13 million of financing from business.

• Peru joined the Forum’s Tropical Forest Alliance to help the country achieve its target of reducing deforestation in the Peruvian Amazon. After Brazil, the country is home to the second largest area of Amazonian forest.

• Five Asian countries dump more plastic into oceans than anyone else combined. The Global Plastic Action Partnership (GPAP) announced its first national partnership in Indonesia to be launched 12 March. Viet Nam, the 2020 ASEAN Chair, has also joined GPAP, committing to a circular economy approach to tackle plastic pollution.

Fourth Industrial Revolution

• The Forum’s Centre for the Fourth Industrial Revolution Network, established in 2017, announced it had grown to more than 100 businesses and governments, including five G7 nations. UNICEF, the Office of the UN High Commissioner for Human Rights and the World Food Programme became the first international organizations to join.

• The Network also welcomed Colombia, Israel and the United Arab Emirates as Affiliated Centres for the Fourth Industrial Revolution – independent institutions committed to helping shape and pilot policies for emerging technology, such as artificial intelligence and blockchain.

• The Indian state of Andhra Pradesh announced it will adopt the Network’s Advanced Drone Operator’s Toolkit, a policy framework developed in collaboration with 10 civil aviation authorities, eight international governmental organizations
and 23 private companies, including the Governments of Rwanda and Switzerland. The move paves the way for Andhra Pradesh to scale up commercial drone activity.

- The Centre for the Fourth Industrial Revolution Japan launched a new global initiative focused on accelerating the responsible and sustainable development of smart cities. A coalition of G20 cities will be formed to help ensure that global smart city efforts are built on a common set of human-centred principles and shared policy frameworks.

- A pilot project to protect airports and other critical infrastructure from cyberattacks was launched at the Annual Meeting. Willis Towers Watson will be the first to pilot the project.

Public-private cooperation

- With financial backing from PACT and the Children’s Investment Fund, and backed by 25 civil society organizations, the Forum launched a new initiative, Preparing Civil Society for the Fourth Industrial Revolution, aimed at helping civil society to meet the challenges presented by rapid technological change.

- A group of international businesses teamed to launch the Partnership for Global LGBTI Equality. Members of the Partnership agree to operationalize the UN’s LGBTI Standards of Conduct worldwide across their business by 2020. The Partnership plans to enlist at least 50 other member companies by 2020.

- Members of the Forum’s Platform for Good Digital Identity announced plans for supply chain pilots that bring together digital identity and digital payments to improve transparency, accelerate financial and digital inclusion of smallholder producers, and directly reward them for sustainable practices.

- The ID2020 Alliance launched a digital identity certification mark, to incentivize the design and use of digital identity solutions that adhere to the highest standards of privacy protection, user control and interoperability.

- The Forum teamed with the World Bank and the International Committee of the Red Cross to launch a High-Level Group on Humanitarian Investing to unlock private-sector capital for investment in fragile economies.

- Twenty-five global businesses announced they would work with Terracycle, a recycling specialist, to launch the Loop Alliance Initiative, a new concept of reusable packaging. The scheme, which will involve customers paying a refundable deposit for the durable packaging with no extra fee for collection, will recover the environmental costs of production after three or four uses.

- The Wellcome Trust committed $260 million over five years to improving basic understanding of depression and anxiety. The research will concentrate on psychological therapies that can be delivered early in life and at the onset of illness, as mental health problems typically start at a young age.
• A new public-private partnership was announced between the Government of Ghana and Novartis to improve and extend the lives of people with sickle cell disease in the country. Approximately 1,000 children are born with the disease in Africa every day and over half die of before their fifth birthday.

• The Global Youth Alliance was launched at the Annual Meeting by Facebook, Nestlé and Nielsen to support skills for young people in emerging and developed countries.

• Valuable 500 is a new campaign aimed at releasing the social and economic potential of the 1.3 billion people around the world who live with a disability. The campaign will seek to sign up 500 global businesses to commit to putting disability on their board agendas in 2019.

• Rwanda became the first African country to join Alibaba’s global trading platform, which is aimed at increasing e-commerce in emerging markets.

• Google and SAP announced Circular Economy 2030, a $400,000 competition to support entrepreneurs that promote sustainable consumption and production.

• Eight global universities committed to establish a new community, the Global Alliance of Universities on Climate (GAUC), with the goal of collaborating on promoting measures that support the UN conventions on climate change and the Sustainable Development Goals. They are: Australian National University; University of California, Berkeley; University of Cambridge; Imperial College London; London School of Economics and Political Science; Massachusetts Institute of Technology; University of Tokyo; and Tsinghua University. It is intended that more universities will be included in the coming years.
Opening Concert

SoundShirt
Global public opinion strongly in favour of openness and collaboration

A global poll by the Forum finds that a majority of people in all regions believe cooperation between nations is either extremely or very important; that a large majority reject the notion that national improvement is a zero-sum game; and that most people feel that immigrants are mostly good for their adopted country. The research commissioned ahead of the Annual Meeting can be viewed as an endorsement by the public of the key principles of the multilateral system. It roundly debunks the negative notion of immigrants that has raced to the top of the news agenda across Europe, North America and elsewhere.

The data was used in panel sessions and workshops at the Annual Meeting as a guide for participants as they discussed how to build an architecture for global governance that is capable of fostering the international collaboration necessary to solve the world’s most critical challenges.

One finding highlighted in the discussions is that, while most people still believe in the power of international cooperation, they share a much less positive view of their own country on social progress. This despondency at the lack of upward mobility is felt most acutely in Western Europe.

Majorities in all regions and super majorities in most regions think cooperation between countries is very or extremely important.

**QUESTION**
How important do you think it is that countries work together towards a common goal?
In most regions new immigrants are seen as “mostly good;” only in Europe do majorities see new immigrants as “mostly bad.”

where only 20% said they feel it is extremely or somewhat common to be born poor and become rich through hard work. Respondents in the US were only a little more positive (33%). As well as providing insight into the global public’s attitudes on opportunity and international relations, the survey also shines a light on other important matters of global importance in 2019, such as sustainability, climate change, and the role of technology in society.

“The combination of climate change, income inequality, technology and geopolitics pose an existential threat to humanity. What we see

with this research is that, while the international community’s capacity for concerted action appears constrained, the overwhelming desire of the global public is for leaders to find new ways to work together than will allow them to cooperate on these critical shared challenges we all face,” said Klaus Schwab, Founder and Executive Chairman at the World Economic Forum.

Read the full findings: https://www.weforum.org/pages/qualtrics-opinion-poll-on-globalization-4-0

Respondents in Eastern Europe/Central Asia, Latin America, and Western Europe see upward mobility as elusive in their country.

QUESTION
Thinking about [your country] today, how common is it for someone to start poor, work hard, and become rich?

QUESTION
Would you say that new immigrants are mostly good or mostly bad for [your country]?
Programme tracks

This year’s programme was designed to advance a set of global dialogues, with bold ideas and exciting opportunities to consider in the year ahead. Sessions are organized by the below tracks:

A **global dialogue on geopolitics in a multiconceptual world** to enable candid and constructive discussion on how to drive future cooperation along with a **global dialogue on peace and reconciliation** to catalyse large-scale, multistakeholder support for diplomatic efforts on key fault lines around the world.

A **global dialogue on the future of the economy** to better reflect the structural changes inherent in the Fourth Industrial Revolution along with a **global dialogue on financial and monetary systems** to jointly shape our monetary and financial systems by not only leveraging new technologies but also achieving sustainable growth and long-term societal well-being.

A **global dialogue on industry systems** that anticipates how the Fourth Industrial Revolution provides opportunities to substantially enhance the availability and delivery of products and services along with a **global dialogue on technology policy** to define the principles for new and emerging technologies to ensure that they are underpinned by a values-based framework.

A **global dialogue on risk resilience** to promote systems thinking to radically improve our collective and integrated management of the key environmental systems upon which our societies and economies depend along with a **global dialogue on cybersecurity** to ensure that digital innovation and the technological backbone of the Fourth Industrial Revolution are both secure and trusted.

A **global dialogue on institutional reform** to rethink the global institutional frameworks that emerged in the 20th century and adapt them to ensure they are relevant for the new political, economic and social context along with a **global dialogue on economic cooperation** to create a new framework of rules and institutions integrating all aspects of global economic cooperation.

A **global dialogue on human capital** to revisit the notion of work substantially changing and the relevance for talent, well-being and competitiveness along with a **global dialogue on a new societal narrative** to move away from consumption and materialism to a more humanistic focus.
Reinvigorating multilateralism

As the most pressing challenges of our time are met by an increasingly fractured response, we may need our divided international system more than ever before.

Geopolitical tensions are simmering across the globe, from the US-China trade war, to questions over Syria and Iran, and a political crisis unfolding in Venezuela. These are all playing out against a backdrop of slowing global growth and a rise in reactionary populism, and amid the mega trends of climate change, migration and digitization.

Some of the world’s leading thinkers and decision-makers convened at the Annual Meeting to discuss the myriad concerns under the theme, Globalization 4.0: Shaping a Global Architecture in the Age of the Fourth Industrial Revolution. As participants grappled with big questions of how to tackle manifestations of rust belt discontent, protracted conflict in the world’s most fragile states, or the geopolitical implications of an energy transition, the discussions were underscored by an understanding that the geopolitical power dynamic is in a state of momentous and tumultuous flux.

“We no longer live in a bipolar or unipolar world, but we are not yet in a multipolar world,” said António Guterres, Secretary-General of the United Nations, referring to the decline in American primacy and a rising China. “We are in a kind of chaotic situation of transition.” The relationship between the world’s most important powers, the United States, Russia and China, he noted, has never been so dysfunctional and that is true as much for the economy as it is for the UN Security Council.

The impact of these oscillating power shifts is already being felt in global markets, with the trade war between the US and China, and the perceived volatility of the US administration and its foreign policy, dominating the geopolitical agenda at the Annual Meeting.

The fallout from the trade war – in the past year the US and China have imposed tariffs of $250 billion and $100 billion on each other’s goods respectively – is reverberating around the globe and coalescing powerfully in Asia.

Calling for the trade dispute to be “settled as quickly as possible because the uncertainty is killing us”, Kishore Mahbubani, Professor in the Practice of Policy, National University of Singapore, argued that US geopolitical power plays appear to be setting it up for a future where it is less engaged in the world’s most dynamic region. “If you are thinking strategically in the US, they should be pushing for greater trade engagement with Asia because that will determine the balance of influence 10 years from now,” he said.

Conversely, as China forges ahead with its ambitious Belt and Road Initiative, involving an estimated $1.5 trillion in Chinese investment in infrastructure across the region, the US position appears more and more withdrawn. Running tandem to the ensuing trade war is a slowing Chinese economy, contributing to a gloomier economic outlook in 2019, the effects of which will also be felt in the global energy market and in the geopolitics of supply and demand.
Globalization 4.0: Can you be a patriot and a global citizen?

Today’s global risks need global solutions. We’ve identified six key questions we must address to make Globalization 4.0 work for all.

“...Our ability to react to those in need is widening and we won’t possibly manage to cope and cover the gap with traditional means.

Peter Maurer, President, International Committee of the Red Cross (ICRC), Geneva

“When we talk about the global economic slowdown, one country is frequently cited and that is China, and we all know that Chinese economic growth might be the slowest in the last three decades,” said Fatih Birol, Executive Director of the International Energy Agency. “Let’s not forget that in the past 10 years China was responsible for more than 50% of the global oil demand growth. If the Chinese economy slows, there will be implications.”

Leaving aside projections vis-à-vis oil sanctions and Iran, there are also huge geopolitical implications of an energy transition on the horizon. “Think about how much geopolitical reordering happened just on account of the US shale boom,” said Professor Meghan O’Sullivan, Jeane Kirkpatrick Professor of the Practice of International Affairs and Director, Geopolitics of Energy Project, Harvard University, when considering the impacts of nations fulfilling their carbon emission targets. “And imagine a complete change in the global energy mix, how much that is...
going to impact overall political relationships and how much it is going to change the nature of the threats, the possibility for alleviating energy poverty, and the politics of climate change on the other hand."

These changes come at a time when the international system, undermined by a rise in emboldened unilateralism and illiberal democracy, is weaker and more divided than any time since the Second World War. Deliberating on solutions, political and business leaders strongly urged a reinvigorated multilateral system as a panacea to an increasingly volatile world.

In a special address, Angela Merkel, Chancellor of Germany, said: "Multilateralism is not all that easy, but I have to think of the possible alternatives. We have populist and nationalist challenges and we have to stand up against them." She added: "Commitment to multilateralism is essential and a precondition for shaping tomorrow. Anything else will lead us into destruction."

She acknowledged that existing international institutions are far from perfect but said they should be adapted and remodelled, rather than upended and replaced anew.

As the Fourth Industrial Revolution ushers in an era of rapid technological change, international institutions must modernize to better reflect and address new realities, such as formulating rules on global e-commerce, or the weaponization of artificial intelligence (AI).

The tremendous progress international institutions have made in tackling some of the world’s most crucial issues offer strong support for Merkel’s aspirations. Take, for example, the big gains in poverty reduction. In 1981, some 41% of the global population lived in extreme poverty, while today that figure is less than 10%.

Yet experts predict that in a weaker international political system, one marked by climate change and protracted conflicts in countries such as Syria, Yemen and South Sudan, humanitarian distress is likely to be compounded in the next few years.

In the same way that some international economic and political institutions will be rendered obsolete if they don’t adapt, the systems designed to deliver peace and security also warrant critical revision. David Miliband, President of the International Rescue Committee, argued that a conflation of “humanitarian” with “emergency” has led to a glaringly ineffective reliance on short-term strategies to address long-term crises.

Only 2% of the global humanitarian budget currently goes to education, a state he described as “not just immoral, but a strategic dereliction of duty.”

Peter Maurer, President of the International Committee of the Red Cross, encapsulated the problem this way: "The recognition is pretty big that something is wrong in terms of the concept and approach. Our ability to react to those in need is widening and we won’t possibly manage to cope and cover the gap with the traditional means."

Maurer was reflecting on the state of the humanitarian sector, but his point strikes at the heart of the geopolitical challenge too – that the most crucial challenges of our time, current trade fractures and simmering conflicts, will not be solved by a business-as-usual approach.
Forum Agenda
Why businesses are nothing without strong human rights

The Forum Agenda attracts more than 4 million readers every month. The following article is among the most read blogs on the theme of Globalization 4.0.

Let’s start with a seemingly unconventional proposition: civil society and business share the same space and, therefore, should share an interest in defending what unites them.

How controversial is that proposition, really?

This “shared space” is anchored in accountable governance. Civil society actors and companies both depend on the same legal and institutional frameworks that define the shared space to operate. Civil society cannot flourish, and business will struggle to thrive, without the rules and standards that hold public and private powers accountable.

Civic freedoms – freedoms of expression, association, information and assembly – allow citizens to expose abuses related to corruption, workplace safety, public health, toxic pollution and gender discrimination. These rights support stable, predictable legal and regulatory environments. At the same time, they enable the free flow of information, investment and entrepreneurial innovation. When these civic freedoms are undermined, business and civil society alike are subject to the law of the jungle instead of the rule of law.

To read the full blog, go to https://www.weforum.org/agenda/2019/01/5-ways-businesses-can-back-up-human-rights-defenders

Bennett Freeman, Business Support for Civic Freedoms and Human Rights Defenders, Bennett Freeman Associates LLC; Mauricio Lazala, Deputy Director, Business & Human Rights Resource Centre; and Michael Ineichen, Programme director, International Service for Human Rights
Kenneth Roth in the session Searching for Truth

Session Female Leadership at a Tipping Point

MagnaReady® Magnetic Shirt
Two big issues dominated debate at the Annual Meeting: climate change and inequality. Despite the Paris Agreement, the planet is on track to warm by 3°C above pre-industrial levels. According to the World Bank, this will wipe out 25% of global GDP and cause immeasurable human suffering. Meanwhile, despite a tripling of global GDP since the 1990s, inequality has increased. The pay gap ratio between a chief executive officer and a typical worker in 1978 was 30:1. Today, it’s over 300:1. “Extreme inequality is really out of control,” said Winnie Byanyima, Executive Director of Oxfam International. For 800 million people, it means living in extreme poverty – and that number is rising in sub-Saharan Africa.

In the face of such glaring inequalities and reactionary populism, the leaders of Spain and Italy told participants that they are committed to driving transformative economic change. “Open global markets, free movement of capital and technological revolution did generate a large pay-off as promised, but just for the few,” noted Italian Prime Minister Giuseppe Conte.

Describing the current social contract as “violated,” Conte championed a new vision he calls “new humanism”. He said more robust economic and social fixes and a fairer set of rules are required to improve opportunities and working conditions for ordinary people. He pointed to the new Italian government’s flexible retirement age and greater income support for poor families.

Spanish Prime Minister Pedro Sánchez agreed that the growing wealth gap in Europe and other parts of the world is tearing the fabric of society. Reactionary populism and rising inequality, he argued, are the results of the weakness of global capitalism that have yet to be addressed and are not just the problem of one country but of liberal democracy itself. “We must change now that we have some degree of freedom to do so, and we must do this mindful of the fact that the economy is not self-serving but serves the people,” he said.

The Spanish leader called for urgent and innovative thinking to address the challenges ahead, from discussion of universal wages to how best harness
Globalization 4.0: How do we get countries working together better?

Today’s global risks need global solutions. We’ve identified six key questions we must address to make Globalization 4.0 work for all.

We need to address the societal well-being of our nation, not just the economic well-being.

Jacinda Ardern, Prime Minister of New Zealand

The best video answers are featured on https://www.weforum.org/globalization4

Session Setting Rules for the AI Race

Institutional reform and economic cooperation

rapid technological change in data, artificial intelligence (AI) and machine learning to improve government services.

The global institutions responsible for framing rules in trade, finance and public goods, set up over 70 years ago, now seem ill-suited to tackling today’s pressing tasks. The creaking, old-school architecture of multilateral government-to-government structures is typified by the World Trade Organization (WTO), which has failed to complete a major agreement in a quarter century, or the United Nations Security Council, which has failed to prevent over 400,000 deaths during Syria’s seven-year civil war. A radical rethink of international and regional institutions is needed to ensure that globalization’s latest incarnation delivers sustainable, human-centred development.

The governance of global trade has also been badly affected by recent geopolitical transformations. But while the WTO stagnates, regional trade agreements have mushroomed, including those between US-Mexico-Canada,
EU-Canada and EU-Japan. In Africa, the Continental Free Trade Area aims to integrate a market of 1.2 billion people while driving greater digital connectivity and job security. Cyril Ramaphosa, President of South Africa, said: “This could well be the great industrialization moment for the continent.”

Along with President Paul Kagame of Rwanda, the two presidents addressed the issue of the African Continental Free Trade Area, launched in 2018, which aims to significantly raise the current low levels of intra-African trade. Kagame, as Chair of the African Union in 2018, has been a key driver of the initiative, which he called the beginning of a new era for trade and investment in Africa.

The fact that 44 of Africa’s nations signed the agreement at its launch and others have come on board since then shows the strong political will behind the initiative, Kagame said. Integration will eventually create a market of 1.2 billion people and pull together the continent’s countries, many of which are too small to compete effectively alone, he said.

There is a new appetite among groups of countries spanning different regions to align their trade policies within specific economic sectors – so-called “plurilateral” agreements. This approach is helping update global rulebooks for e-commerce, fisheries, investment facilitation and services.

In a session on digital emerging markets, Jack Ma, the Executive Chairman of Alibaba, noted that many countries provide incentives and benefits for large companies to participate in global trade but small and medium-sized enterprises (SMEs) often get left behind. “We think there should be free trade zones for small businesses,” he said. He cited the Alibaba-led Electronic Trade Platform as a means to level the playing field for young people and SMEs to give them direct access to global markets.

The financial crisis a decade ago inspired some important improvements in the architecture of financial stability. However, there is scope to strengthen it in several areas. We must find ways to finance the $1 trillion of new money needed every year for the development and climate-related infrastructure envisaged in the Sustainable Development Goals (SDGs) and the Paris Agreement. A G20 task force is leading a coordinated shift in multilateral development bank business models to transform them from direct lenders to risk-mitigators of private investment. This game-changing approach represents the best chance for funding the SDGs.

Nowhere is the challenge to the world’s existing cooperative architecture more pressing than with respect to climate change. The crucial execution of the Paris Agreement’s “nationally determined contributions” is faltering. Yet no effective multilateral structures exist to guarantee that countries will hit their targets. The celebrated nature documentarian Sir David Attenborough made an impassioned plea to participants at the Annual Meeting to care for the natural world. He said that even though the ready accessibility of nature programmes and the ability of filmmakers to reach the remotest corners of the world have made it easier for people to learn about nature, humanity’s connectedness with the natural world is more tenuous than ever. “The majority of people are out of touch to some degree with the richness of the natural world.”

The good news is that a growing number of cities, provincial states, companies and civil society organizations are setting their own emissions reduction targets. There is optimism this could generate a snowball effect of political, industry and citizen peer pressure and benchmarking.

There is no global institution for technology governance, yet the stakes of getting governance wrong are immeasurably high. Artificial intelligence (AI) could generate an estimated...
$15 trillion in economic value by 2030 – yet just nine companies in the United States and China control its future. Consequently, AI could easily increase inequality. Governments can learn from software development and adopt an open-source approach to creating regulation in partnership with the private sector.

Since the global financial crash, mistrust of corporations has deepened. Societies across the world resent how international companies dodge domestic taxation with impunity and harvest the benefits of gathering other people’s data while regulators scramble to keep up. According to Byanyima, $170 billion a year is siphoned off into tax havens. In the new economy, company directors have a heightened fiduciary duty to ensure their firms deliver long-term value and not just short-term returns.

The holy cow of maximizing shareholder value needs to give way to maximizing stakeholder value, through a reinvestment of profits into R&D and paying taxes in the jurisdictions where profits are generated. The OECD has created an Inclusive Framework on Base Erosion and Profits Shifting (BEPS) that equips governments with the instruments required to tax companies more effectively.

António Guterres, Secretary-General of the United Nations reaffirmed the principle of multilateralism as the only way to deal with global problems. Rather than vilifying those who disagree with us and calling them populists, we need to understand why they disagree with us, he said.
Forum Agenda
Globalization 4.0 – what does it mean?

The Forum Agenda attracts more than 4 million readers every month. The following article is among the most read blogs on the theme of Globalization 4.0.

After World War 2, the international community came together to build a shared future. Now, it must do so again. Owing to the slow and uneven recovery in the decade since the global financial crisis, a substantial part of society has become disaffected and embittered, not only with politics and politicians but also with globalization and the entire economic system it underpins. In an era of widespread insecurity and frustration, populism has become increasingly attractive as an alternative to the status quo.

But populist discourse eludes – and often confounds – the substantive distinctions between two concepts: globalization and globalism. Globalization is a phenomenon driven by technology and the movement of ideas, people and goods. Globalism is an ideology that prioritizes the neo-liberal global order over national interests. Nobody can deny that we are living in a globalized world. But whether all of our policies should be “globalist” is highly debatable.

After all, this moment of crisis has raised important questions about our global-governance architecture. With more and more voters demanding to “take back control” from “global forces”, the challenge is to restore sovereignty in a world that requires cooperation. Rather than closing off economies through protectionism and nationalist politics, we must forge a new social compact between citizens and their leaders, so that everyone feels secure enough at home to remain open to the world at large. Failing that, the ongoing disintegration of our social fabric could ultimately lead to the collapse of democracy.

To read the full blog, go to https://www.weforum.org/agenda/2018/11/globalization-4-what-does-it-mean-how-it-will-benefit-everyone/

Klaus Schwab, Founder and Executive Chairman, World Economic Forum
How to tackle the biggest risks on the financial horizon

Persistent economic inequality is calling into question the financial infrastructure that was put in place after the global financial crash of 2008. What more can be done to avert a new crisis?

A number of statistics suggest that the global economy is off to a solid start in 2019. The United States and Europe show steady – if plateauing – growth. China’s growth is expected to continue at 6% or more for 2019. And regulations since the 2008 financial crisis have improved the stability and capitalization of large banks around the world. Indeed, if the biggest threats to the global economy resembled those that caused the last crisis, then complacency might be in order.

Yet economic inequality continues to rise. Extreme climate events threaten every region around the world. And geopolitical challenges – from Brexit to the US-China trade dispute – suggest that recent gains could be fragile. The major question for the future of the economy and financial systems is: have we created the right financial infrastructure to weather the next crisis and foster a new generation of more inclusive globalization?

The answer, according to many experts, is: no. One challenge involves understanding the tectonic changes that have taken place within the financial industry in recent years, from the rise of “fintech” to the growth of the non-banking financial sector. A second issue involves identifying the biggest risks that loom on the economic horizon.

Technology has changed the global economy by creating both opportunities and challenges for globalization 4.0. In many cases, innovation has lowered transaction costs, democratized investing and offered economic opportunities to new communities. Yet, technology has also exposed vulnerabilities to international financial systems.

“Fintech” – technology for providing banking services, such as electronic payment and peer-to-peer lending – has disrupted business as usual in the financial services industry. In China, large technological platforms such as Alibaba and Tencent have gained hundreds of millions of users by providing electronic payment services for large portions of China’s population that lacked access to traditional banking.
Globalization 4.0: How do we create a fairer economy?

Today’s global risks need global solutions. We’ve identified six key questions we must address to make Globalization 4.0 work for all.

“

We need to debunk the myth that you need first to achieve higher growth before you reduce inequality.

”

Winnie Byanyima, Executive Director, Oxfam International

The best video answers are featured on https://www.weforum.org/globalization4

Developed markets such as the United States and Europe have seen smaller-scale examples of fintech innovation, but, in all cases, the technologies have raised questions about what and when to regulate. Too much regulation could stifle innovation that increases efficiency of financial systems and benefits underserved populations. Too little could leave both users and markets vulnerable. One major technological innovation, crypto-currencies, saw marked declines in 2018. Even though crypto-assets are unlikely to displace established currencies, experts agree that the technology underlying bitcoin, Ethereum and others could prove useful in improving resilience and security for financial services. Several central banks are already testing small-scale uses of distributed ledger technology.

Another major change in global investing involves the rise of “passive” management, or index investing, over more traditional, active investing vehicles. Passive funds now account for 44% of total assets under management in equity funds, and concentration of ownership has moved to a handful of...
US-based firms, such as Vanguard and BlackRock.

How will the concentration of wealth in these services change the financial industry? One major question involves liquidity: what would happen if an external shock prompted a major market sell-off? In December 2018, investors got a preview of the volatility that could ensue, as markets plunged and set off jitters worldwide.

Following the 2008 crisis, regulators focused intently on reforming banks to ensure that problems with a single institution would not trigger systemic shocks. It is unclear whether the “non-bank” financial sector now poses such risks and, if so, what regulation should ensue.

Another change facing global businesses involves mounting pressures from consumers, employees and investors to embrace long-term strategies of value creation. Decades ago, corporate leaders tended to claim that “the business of business is business.” By contrast, today’s firms need a broader licence to operate than simply generating profits for shareholders.

“Every company at Davos knows that they’re one tweet away from a social disaster,” said Ngaire Woods, Dean of the Blavatnik School of Government, University of Oxford. In a world where social media can fell a Fortune 500 company, businesses have increasingly sought to demonstrate their social purpose and long-term values.

Nonetheless, the pressure to deliver short-term profits persists. How can executives balance the need to demonstrate long-term social impact while many investors press for ever-increasing quarterly earnings? Changing stakeholder discourse and quantifying social impacts could give executives more tools to focus investors’ attention on their long-term goals. Family businesses could also offer models for long-term value creation. Family-owned businesses, which account for roughly two-thirds of all businesses worldwide, tend to have higher public-trust rankings and more latitude to focus on long-term strategies than their publicly owned counterparts.

Better metrics could also help companies demonstrate their corporate stewardship and encourage investors to broaden the terms by which they evaluate companies. However, standards for environmental, social and governance (ESG) data are inconsistent and confusing. One company reported receiving 55 ESG surveys, and the 12 major rating agencies show a near-zero correlation in their corporate ratings. The result is a fractured landscape offering little clarity for investors, executives, employees or consumers.

As the global economy adapts to these new pressures and technologies, one of the biggest questions is whether today’s financial and monetary systems are resilient enough to withstand the shocks that could be ahead.

Cybersecurity is a major focus for bankers and regulators alike. Is the financial system sturdy enough to handle outages of core services or major institutions? Technologies such as cloud computing could help distribute risks and ensure continued operation of critical financial services. However, executives have been hesitant to experiment with migrating technology for core functions or consumer data, given the risks.

Another major challenge facing the global financial system involves the growing narrative of de-globalization. Public pushback to globalization threatens to curtail the options available to policy-makers in responding to future shocks. For example, during the financial crisis, the Federal Reserve had the flexibility to support US banks and provide liquidity to other central banks. Political pressure could limit the range of options available to future economic policy-makers.
Geopolitical risks, such as the US-China trade dispute, could also undermine the economic recovery of the last decade.

Ten years ago, many companies looked to China as the “factory of the world.” Today, rising domestic consumption now constitutes 80% of China’s GDP, and in 2018, the growth of imports exceeded that of exports. “China is becoming the market of the world,” said Song Zhiping, Chairman of the Board, China National Building Material Group Corporation.

Trade barriers would complicate US companies’ access to Chinese markets and could impair growth in China as well.

The cascading effects would be tremendous. For example, commodity-dependent countries rely on China to purchase their exports, and falling commodity prices would cause declines in a wide range of markets.

Economic experts also worry about cascading effects of geopolitical issues such as Brexit. Ensuring that the global economic system is strong enough to withstand rising populism or a trade war will require strong multilateral institutions and political commitments to cooperate. But even with such systems and relationship in place, one of the biggest risks facing economies around the world involves the growing threats associated with climate change.
Four ways we can fix economics in 2019

“It was a chance... for us to send pain the other way. And we took it.”

A Brexiteer’s statement in the wake of the referendum in 2016 captures the frustrations felt by many under the twin forces of globalization and the Fourth Industrial Revolution. Never has the economy changed so quickly, nor with such glaring visibility of the gap between the winners and those left behind. The backlash is hardly surprising.

Although many advanced economies have reaped enormous benefits from globalization and technological advances in recent decades, they have also experienced a hollowing out of the middle class; growing market concentration within many sectors which means fewer employers and less power for workers; as well as a decoupling between productivity growth and wage increases.

In many emerging markets, the picture is different. People feel more positive about digital technology when it helps to level the playing field by providing access to information, markets, services and employment, allowing entrepreneurs to thrive. Yet, as the promise of the manufacturing-led development model of the past fades, it is unclear what will replace it. A newly prosperous middle class is starting to worry whether a path to success will be open to their children.

To read the full blog, go to https://www.weforum.org/agenda/2019/01/four-ways-we-can-fix-economics-in-2019/

Saadia Zahidi, Managing Director, Head of Centre for the New Economy and Society, World Economic Forum
System risk and the reliable resilience of nature

All of our interconnected systems share a dependence on one fundamental natural system: Earth

System risk increases with the complexity of systems, and with the increasing interdependence of multiple systems. Corollary to that, at least in most instances, is that resilience to risk moves in just the opposite direction – the more complex and intertwined a set of systems, the less resilient any given system becomes. The direction of threat becomes more difficult to identify and the knock-on effects become more difficult to calculate.

And yet on one level, all of our systems – financial, infrastructural, technological, political, social – share an irreducible dependence on the one, fundamental natural system: the earth itself. Increasingly, we recognize the truth that the earth is a single holistic system, comprising interdependent ecosystems, and that the health of any one of them is inextricably tied to the health of the others and of the whole. Systems of humankind’s devising are ultimately irrelevant to the earth.

This era, that some have accurately termed the Anthropocene, could well just pass. The earth will warm, the icecaps melt, the seas rise, and...
Globalization 4.0: How do we save the planet without killing economic growth?

Today’s global risks need global solutions. We’ve identified six key questions we must address to make Globalization 4.0 work for all.

We have to recognize that every breath of air we take, every mouthful of food we take, comes from the natural world. And if we damage the natural world, we damage ourselves.

Sir David Attenborough, Broadcaster and Naturalist

The best video answers are featured on https://www.weforum.org/globalization4

unspeakable disasters befall humanity. The fragility of our systems will be laid bare as the collapse of one brings down many others. But the earth will be fine, whatever the sad fate of humanity. The resilience of our systems will never match that of our planet.

We as a species may be pardoned for not sharing our home’s indifference to our fate and that of our systems. We are undeserving of pardon, however, for our failure thus far to act on what we know to be true: that our poor stewardship of the environment gravely imperils our civilization and that the single greatest systemic risk is one of our own making. We have a gathering awareness of the interconnectedness of our planet’s systems. We know that what we mine or pump from beneath the earth’s surface, what we cut down in its forests, what we plant and graze, harvest and slaughter, what we burn and spew into the air, what we pull from the oceans and what we dump back into them – all of it impacts, directly or indirectly, what happens in each piece.

The simple mandate to preserve that most fundamental system has now assumed unprecedented urgency. And yet there is little sign that we’re ready to get on track to reach even the modest Paris goals of passing peak carbon within the next two years, halving global carbon emissions by 2030, and keeping to within 2°C of pre-industrial levels. The politics of the moment are just not conducive to taking the more extreme measures our plight demands. The tide of populism, often entwined with nativist and nationalist movements, has not yet begun to ebb. The worsening bilateral relationship between the incumbent superpower and the newly rising one threatens to foreclose – at least for now – the possibility for badly needed cooperation between the two on climate issues.

In the absence of support from the present US administration, many leaders of smaller states, as well as subnational actors like governors and mayors, are taking the initiative as well as taking up some of the slack. But it’s far from enough.

Climate change now poses system risk across a broad swathe of critical systems. Risks to the food system are among the most menacing. While for decades humanity seemed to be winning the struggle for food security, in recent years the outlook has turned grim: the famine declared by the United Nations in Somalia in 2011 was the century’s first, but in 2017, the regions of four nations – Yemen, Somalia, South Sudan, and Nigeria – were either at or past the brink of famine. War and famine, as ever, ride side by side, the one often the cause of the other. But it works the other way, too. Climate change puts extreme pressure on food
systems by both drought and flood. In the case of the former, scarce water and the food crops requiring it become worth fighting for and dying over.

The mutual impact of our oceans and our atmospheric climate are increasingly well-understood, and what we know now is grim. As with our melting permafrost zones, our warming oceans lose their capacity to sequester carbon, exacerbating atmospheric warming in a dangerous spiral. Warmer oceans are more energetic oceans, and one dangerous manifestation of that surging oceanic energy is the conspicuous increase in severe weather systems – more powerful storms carrying more water and packing higher winds.

Oceans are also a major source of food, on which hundreds of millions of people depend for protein. As waters warm, they acidify and their oxygen levels decrease. Fish – their metabolisms already increased by their warmer environs – require not less but more oxygen, and so they abandon traditional fishing grounds for cooler, more oxygenated waters. Industrial fishing fleets, already decimating fish stocks by pulling the human weight of China from the oceans every year, may be able to follow what fish remain to the distant waters they flee to. But not so the local fishermen of the African coasts, who choose the perils of migration or of piracy over slow, inexorable starvation.

The Earth may be ultimately indifferent to humanity’s fate, but we cannot be – neither in the long term nor in the short term. While it is encouraging to see how action that we take to mitigate climate change will bring growth, open up new entrepreneurial opportunities, and create, by some estimates, as many as 24 million jobs, this is cold comfort to those whose livelihoods will be upended in the short run.

The University of California, Berkeley sociologist Arlie Russel Hochschild’s book *Strangers in their Own Land* explored the paradoxical hostility to environmental agencies like the Environmental Protection Agency felt by direct victims of environmental disasters in the poor parishes of Louisiana, in the American South. Hochschild’s work makes clear that the resistance environmentalists encounter from populists is attributable, at least in part, to a certain callousness and condescension on the part of elites and a failure to take seriously enough the concerns of those who fear the economic disruption of a transition away from fossil fuels. Even as we seek to mitigate climate change, we must work to mitigate the economic blow on people whose livelihoods are intimately tied to coal and other fossil fuels.

The growing consensus is that strict taxes on carbon, coupled perhaps with a market for carbon credits, is the only feasible way to reduce emissions in the short term. Meanwhile, to continue as a species, we need to wean ourselves off meat, and especially beef. New feed additives that reduce bovine methane emissions will help, but the fact remains that our current diet is unsustainable.

Continuing our pursuit of carbon sequestration technologies is well and good, but implementation at any scale that would make a dent is still decades away and our clock is running down fast.

In the end, the resilience of our own artificial systems may rest on our wisely and respectfully leveraging our planet’s own natural resilience. Nature has evolved a fine-tuned and robust ability to heal, and what’s become clear to experts from atmospheric scientists to zoologists is that were humanity simply able to give enough of the planet back – to protect more forests, from the taiga to the tropical rainforests, to cordon off wetlands and coastal ecosystems, to ban industrial fishing fleets from large swaths of the oceans – the earth would bounce back quickly.

Like any proposed solution, this would take immense political will. Of all our man-made systems, our social and political ones are perhaps the most complex, and worryingly, our least resilient.
Building trust and security in cyberspace

The modern internet is the example par excellence of a system whose explosive growth, complexity, unquestionable utility and increasing centrality to our lives has grown in tandem with the corresponding problems it presents: it is uncontrollable, highly vulnerable and intimately connected to any number of other systems, saddling all other systems from banking to power grids with its same vulnerabilities. As the Fourth Industrial Revolution unfolds with the internet indisputably at its core, the internet’s indispensability will be matched in scale by a dangerously high-risk profile.

The annual shortfall of trained cybersecurity workers to tackle cybercrime is now an estimated 3.5 million and, for the owners of the 20-odd billion networked devices in the world, there’s far too much at stake to wait for long-term solutions. For now, major internet companies must step up their game and serve as the first and strongest line of defence when it comes to privacy and security. And as events of recent years have made abundantly clear, they need to exercise far greater vigilance in preventing the kind of attacks that target voting systems and the democratic process itself.

The Paris Call of 12 November 2018 for Trust and Security in Cyberspace is an important initiative that has managed to rally 28 European Union members, many of the democratic states of East and South-East Asia, and all but one member of NATO. Numerous consumer-facing internet companies and cybersecurity providers have joined in, too. Notably absent is representation from the world’s largest country by internet users: China.

In this multipolar and multiconceptual world, is it enough to gather only states committed to one idea of internet governance? It may be tempting to want to put China on the other side of the fence. But a wiser approach might be working together on shared issues like transnational cybercrime and building a working relationship that may, as the Paris Call intends, build both trust and security in cyberspace.
Forum Agenda

Privacy is a human right – we need a GDPR for the world

The Forum Agenda attracts more than 4 million readers every month. The following article is among the most read blogs on the theme of Globalization 4.0.

Against the backdrop of a "techlash", the Chief Executive Officer of Microsoft called for new global norms on privacy, data and artificial intelligence.

Satya Nadella, who has been shifting Microsoft’s focus to cloud computing, said he would welcome clearer regulations as every company and industry grappled with the data age.

In a talk at Davos, he praised GDPR, the European regulation on data protection and privacy that came into force last year. "My own point of view is that it’s a fantastic start in treating privacy as a human right. I hope that in the United States we do something similar, and that the world converges on a common standard."

The default position had to be that people owned their own data, he said.

Privacy is just one controversial area for tech companies. Nadella also addressed the growing field of facial recognition.

To read the full blog, go to: https://www.weforum.org/agenda/2019/01/privacy-is-a-human-right-we-need-a-gdpr-for-the-world-microsoft-ceo/

Ceri Parker, Commissioning Editor, Agenda, World Economic Forum
Crystal Award winner Marin Alsop with the Taki Concordia Orchestra, in association with Southbank Centre Orchestra and the Royal Academy of Music, London.

Rena Effendi, Chiara Tilesi and Laura Liswood in the session The Female Icon.

Tsoknyi Rinpoche leads Morning Meditation.

Ursula von der Leyen in the session The Future of the Transatlantic Alliance.
Innovating governance to steer Globalization 4.0

Like its preceding phases, Globalization 4.0 will be shaped by technological advances and governance decisions. But this time people will want to see evidence that it is truly sustainable and for the larger social good.

Almost no industry is untouched by automation and data analytics, and businesses across sectors are learning that they must disrupt or get disrupted. Blockchain in banking, robotics in manufacturing, autonomous vehicles in transport, precision medicine in healthcare and personalization in consumer goods are just some technological applications that are transforming entire industries, and at a breathtaking pace and scale.

But with the opportunities of the Fourth Industrial Revolution come a range of societal concerns, chief among which are data privacy and security, environmental degradation, market concentration that threatens to perpetuate existing inequities, and the challenge of skilling and reskilling people.

To what extent Fourth Industrial Revolution technologies solve these problems will depend largely on national policies and industry-led strategies. Thanks to the spread of information and communication technologies, consumers are closely scrutinizing and increasingly vocal about businesses’ sociopolitical and environmental footprints, putting pressure on governments to regulate to control or incentivize for the larger social good.

Regulators must strike a balance between two competing values: profitability and inequality. While technology can be used to increase profits, it must not be allowed to underpin failing current systems, said Hilary Cottam, Author and Entrepreneur, Centre for the Fourth Social Revolution. “We can use tech to design new systems that address the challenges we face. But we need a revolution,” she added.
Globalization 4.0: How do we make sure technology makes life better not worse?

Today’s global risks need global solutions. We’ve identified six key questions we must address to make Globalization 4.0 work for all.

"We rely more and more on machine learning to help us make good choices. Women need to be there to help machines make good choices."

— Allen Blue, Co-Founder and Vice-President, LinkedIn

Governance itself needs to be innovative to address this conflict, and also to provide the signposts and directional clarity that businesses need to propel growth. New models must be found for creating regulations because governments often cannot keep up with the evolution of technology. The World Economic Forum’s Centre for the Fourth Industrial Revolution, for instance, brings together leaders from the public and private sectors, academia, research organizations and civil society. From its headquarters in San Francisco and an expanding network of Centres in China, India and Japan, leaders from across the world develop and test policy approaches to responsible governance of technology.

As an example of the Centre’s work, the Government of Singapore recently brought out a model framework for the governance of artificial intelligence (AI). The framework aims to understand the risks posed, anticipate the transition challenges for the nature of work and for business models, and proactively take steps to prepare the economy for Globalization 4.0.
It contains several elements that could be instructive for similar efforts on other technologies and in other jurisdictions – a council on ethical use of AI and data, chaired by a former attorney-general, and including a group of industry representatives and senior government officials; a national AI programme that aims to generate 100 use cases, each focused on solving a real problem; and a model governance framework, designed collaboratively and applicable voluntarily, to gather experience and evidence to eventually inform a regulatory or policy stance.

Under a different aegis, but also underlining the cross-border nature of technological transformation and the need for a global response, the state government of Andhra Pradesh in India released an Advanced Drone Operators Toolkit at the Annual Meeting. This first-user manual for governments looking to roll out socially impactful, advanced drone operations aims to help governments overcome the hurdles of implementing drone regulations and accelerate access to airspace, while maintaining safety and security. It also includes specific steps for governments interested in implementing similar programmes.

Indeed, since the technological changes and the challenges they pose are not isolated to a particular country, industry or issue, they present a universal governance challenge and create a significant opportunity for international relations. By providing a shared imperative at a time of emerging and deepening divisions in the international community, cooperation among countries and other stakeholders could spill over positively into other areas of international relations.

Standard-setting is a classic example of international cooperation driven by technological change, and there is an array of areas calling out for clarity on data collection and interoperability standards, such as healthcare and the internet of things, where the absence of standard data protocols threatens to make vast amounts of data practically unusable.

At the same time, the business community must step up and play a leading part in ensuring a “Fourth Social Revolution”, said Subramanian Rangan, The Abu Dhabi Crown Prince Court Endowed Chair in Societal Progress at INSEAD. “They must ask themselves big questions – how do we handle human capital, who owns data, what do we want artificial intelligence to do?” He added: “Even as you deepen cyber capital, you must deepen your moral capital.”

Fourth Industrial Revolution technologies face a “huge inclusion problem”, said Ginni Rometty, Chairman, President and Chief Executive Officer, of IBM, because “a large part of society does not feel it will be good for their future; they feel disenfranchised.”

Technology is moving faster in time than people can skill and reskill. It is imperative that technological advancement be accompanied by efforts to overcome the trust crisis and the skills crisis, a problem that government cannot solve alone. Businesses must do things differently, for instance, by hiring for skills not diplomas or degrees, and creating and accepting new career pathways that may not include college or tertiary education and have respect for the “new collar” jobs thus created.

Sarah Al Amiri, Minister of State for Advanced Sciences of the United Arab Emirates, emphasized that it is vital to educate people at an early age. With the wealth of information available today, there is a danger to what people might learn when they cannot discern information that is valid and peer-reviewed, because nowadays information can be easily manipulated. She also argued that good storytelling is needed as the scientific community is good at using jargon. “Their language is not understood by the public,” she said.
What will doctors do when robots run hospitals?

Globally, healthcare is transforming from a hospital and treatment-based system to a community and care-based one, with greater emphasis on prevention than crisis response. The application of technologies such as data analytics, mobile telephony, wearable sensors and internet of things, genome sequencing and precision medicine is making healthcare a comprehensive system of prevention, maintenance and treatment, empowering individuals to make the right decisions to live healthier lives.

Looking ahead into a future of connected wearables, patients have to be prepared to accept care within their homes and families, and guidelines must be devised and implemented for handling diseases and medical conditions in home-based care settings. And a diverse range of care-related jobs are emerging, for which people must be trained and certified.

In developing countries, newer models for providing solutions at low cost and at scale are emerging, such as “e-ICUs” in rural and remote settings. Indian hospitals are offering tele-medicine and tele-radiology solutions around the world, at scale. And with mobile phones becoming ubiquitous, their high computing and imaging power could soon be used to transform them into monitoring and diagnostic instruments, making them a disruptor that could move us to the future of medicine.

As robots take over more functions, the role of humans in future healthcare systems must evolve – it is time to train doctors and nurses differently, and to choose them for empathy.
Forum Agenda
5G and the growing need for national CTOs

The Forum Agenda attracts more than 4 million readers every month. The following article is among the most read blogs on the theme of Globalization 4.0.

The profound impact that 5G will have on the world is hard to overestimate. It is a platform for innovation that will bring about a wave of new opportunities and economic growth to nations in every corner of the globe.

New jobs will be created – and old ones reskilled – as new services and applications enabled by 5G are realized.

5G will also help us establish, and foster, a cleaner, safer and more sustainable society for current and future generations to enjoy.

It’s clear from the many engaging discussions at the World Economic Forum Annual Meeting 2019 that we simply can’t afford to exclude any country or citizen from the benefits of digital connectivity. With that in mind, I firmly believe that 5G is an investment in a future that we all can benefit from and enjoy. We just need to ensure that this happens.

To read the full blog, go to: https://www.weforum.org/agenda/2019/01/5g-and-the-growing-need-for-national-ctos/

Erik Ekudden, Chief Technology Officer, Ericsson
A Conversation with Abiy Ahmed, Prime Minister of Ethiopia

Special Address by Giuseppe Conte, Prime Minister of Italy

Avantika Dalmia, David Blaine and Francine Lacqua in the session Searching for Magic in Real Life: An Insight, An Idea with David Blaine

Patrick Chappatte in the session Behind the Artist’s Idea: Cartooning for Peace

Carmela Troncoso in the session Ensuring Privacy and Protection in Cyberspace with the Swiss National Science Foundation
How to make Globalization 4.0 work for everyone

The disruptions of technology in the era of the Fourth Industrial Revolution will have a critical impact on jobs and how we view human capital. In shaping a new global architecture, inclusion and equality are key.

The division of labour between humans, machines and algorithms is shifting fast. According to the World Economic Forum’s Future of Jobs Report 2018, by 2025 more than half of all workplace tasks will be performed by machines. According to one estimate, 75 million jobs will be lost to machinery, but 133 million new roles are predicted to be created, leading to an overall surplus, even as robots move into traditional “human” roles of managing and advising, reasoning and decision-making.

Melonee Wise, Chief Executive Officer of Fetch Robotics, said: “This is the goal – robots as colleagues, not competitors, and robots working with people, not in place of them.”

It is not only automation which will lead to a recalibration of the labour market but also the changing nature of work itself. By 2022, 60% of workers are likely to have more than one employer. A rising number of freelancers has given rise to the so-called “gig economy”, with workers taking on flexible stints for different reasons: 56% in one survey said it best meets current needs/goals, with 34% responding it was hard to find permanent work.

The network of internet-mediated, on-demand job platforms allows new generations of workers to shape their own schedules but also creates regulation challenges including whether to treat companies such as Uber as traditional employers that should provide benefits and paid holiday leave, and how to ensure that worker income is taxed.

A key question in preparation for Globalization 4.0 is: what will work look like in the future? It is the job of the education sector – and of training programmes within companies – to predict and build a new skills architecture to equip future and current workers for the next generation of jobs. To achieve this, universities and schools can first aim to build capacity and move away from rigid curricula, while vocational programmes can standardize certification to improve the portability of skills when workers need or choose to retrain. Governments can also step in by providing tax preferential funds to support retraining, a measure China is looking to implement, as well as financial support in the form of unemployment benefits while a worker gains new qualifications.

A new report by the World Economic Forum, Towards a Reskilling Revolution: Industry-Led Action for the Future of Work, posits that 95% of 1.4 million at-risk workers in the United States can pivot into positions that have similar skills and higher wages, at an approximate cost of $34 billion. Yet the private sector could only profitably reskill 25% of them, with the rest likely being cheaper to replace. If the government pushes public resources into reskilling and upskilling initiatives, however, it could retrain 77% of these at-risk workers – and save money in the long run through higher tax returns and less unemployment compensation. It needs only the political will to do so.

The goal is not merely to adapt to the challenges of the Fourth Industrial Revolution but to actively foster more inclusion in the workplace and beyond – harnessing disruption as an impetus.
Globalization 4.0: What should work look like in the future?

Today’s global risks need global solutions. We’ve identified six key questions we must address to make Globalization 4.0 work for all.

“The best video answers are featured on [https://www.weforum.org/globalization4](https://www.weforum.org/globalization4)

We need outstanding talent in our company, which means we have to take diversity and inclusion really seriously, and disability plays a huge role in that for us.

Duncan Tait, President and Chief Executive Officer for Europe, Middle East, India and Africa, Fujitsu

for social progress, bringing marginalized workers and groups into the mainstream for the benefit of all.

Gender parity in employment, for example, is still 108 years off, according to an estimate by the World Economic Forum. Despite a rising number of women in leadership roles, the culture needs to change for fundamental biases to be addressed. “We need to visualize that it is possible with role models,” said Michelle Bachelet, UN High Commissioner for Human Rights, in an all-female panel hosted by The New York Times. Chrystia Freeland, Foreign Minister of Canada, added: “We shouldn’t be afraid of having targets. You have to create the conditions where women want to be successful.”

The rights of LGBTQ workers must also be bolstered. Some countries have taken steps backwards recently even as positive strides are made elsewhere. One panel suggested that commissions could be set up in large companies to investigate prejudice and enforce standards. Workers struggling with mental health issues should also have...
more protection under employment codes. And a further group that seems to be woefully neglected in the world of business is individuals with a disability, despite numbering 1.3 billion, or one in seven worldwide, including the 80% of disabilities that are invisible.

“Disability, collectively, is the most marginalized group of people in the world,” said Caroline Casey, Founder of Binc.

Technology has its role to play – an exhibit at the Annual Meeting displayed cutting-edge tech as applied to the disability field, from eye-tracking keyboards to dynamic Braille watches – but is not a panacea. A more expedient solution is to promote the business case for inclusion. For LGBTQ individuals, one study found that 62% went back in the closet when joining a large corporation and were 30% less productive as a result. The cost of disability exclusion in OECD countries, in turn, is an estimated 7%.

Inclusive corporate policy “is just the right thing to do, and it’s good business”, said Carolyn Tastad, Group President, North America, Procter & Gamble. Paul Polman, Chief Executive Officer, Unilever, added: “If you as a company show respect for every individual, you have a better chance of being respected.”

The case for equality, crucially, is not limited to employment and human capital but relates to the broader need for a new societal narrative in the age of Globalization 4.0. In this age of the “growth paradox” – namely, that as the world economy grows, so, too, does inequality – populist risings around the world, such as Brexit and the gilets jaunes (yellow vest movement) in France, are proxies of a deeper malaise among the middle and lower classes who feel economically disenfranchised.

Guy Standing, Research Professor in Development Studies at the University of London, noted: “We’ve got a new class fragmentation taking place, with a plutocracy at the top, an elite represented here [at Davos] … and a new precariat emerging.”

One formula to redress these imbalances, some participants agreed on the closing day of the Annual Meeting, is to enforce taxation and close tax loopholes so that all businesses pay their fair share. “Extreme economic inequality is out of control,” said Winnie Byanyima, Executive Director of Oxfam International. “Talking about it isn’t good enough.”

Robert E. Moritz, Global Chairman of PwC International, suggested an overhaul of the world’s tax systems, while author and entrepreneur Hilary Cottam called for an attendant “social revolution” to accompany the new technologies of the Fourth Industrial Revolution, noting that all industrial revolutions give rise to inequality.

“We need a new development paradigm,” said Alicia Bárcena Ibarra, Executive Secretary of the UN Economic Commission for Latin America and the Caribbean (ECLAC) – one where equality is “a prerequisite for development,” as well as incentivizing productivity. Civil society will play a key role in framing the conversation around that new, inclusive model of growth. Meanwhile, the existential risk of climate change could provide the “moral equivalent of war” to galvanize action, according to Rutger Bregman, author and historian at De Correspondent.

Above all, the “us vs them” mentality, where immigrants or marginalized groups become the scapegoats for economic malaise, should be avoided as both people and structures adapt to globalization.

Stories matter. To shape a new global architecture that includes all stakeholders in the world’s shared prosperity, a fresh narrative is needed: one that looks beyond GDP and growth alone to include the disadvantaged and make Globalization 4.0 work for all.
Forum Agenda
What the next 20 years will mean for jobs – and how to prepare

The Forum Agenda attracts more than 4 million readers every month. The following article is among the most read blogs on the theme of Globalization 4.0.

The next two decades promise a full-scale revolution in our working lives. Before we look into the next 20 years, let’s take a quick look at the present – and something once considered paradoxical.

We’re already living in an age of a lot of robots – and a lot of jobs.

As the number of robots at work has reached record levels, it’s worth noting that in 2018 the global unemployment level fell to 5.2%, according to a report last month – the lowest level in 38 years.

In other words, high tech and high employment don’t have to be mutually exclusive. We’re living the proof of that today.

Given this synchronicity between employment and tech, I believe there are reasons to be hopeful that jobs will become more accessible, more flexible and more liberating over the next two decades.

To read the full blog, go to https://www.weforum.org/agenda/2019/01/jobs-of-next-20-years-how-to-prepare

Stephane Kasriel, Chief Executive Officer, Upwork
The Secrets to Healthy Longevity with the European Research Council

Ashraf Ghani, President of the Islamic Republic of Afghanistan

Al Gore in the session Safeguarding Our Planet

Basecamp at Rinerhorn
António Guterres, Secretary-General of the United Nations and Børge Brende, President; Member of the Managing Board, World Economic Forum

Caroline Baumann Designing for Everyone

Kamal Nath in the session Emerging Markets Outlook

54th Wildlife Photographer of the Year Award Exhibition in the Gallery
The 25th Annual Crystal Awards

Monday 21 January, Congress Hall, 18.00 - 18.30

The Crystal Awards celebrate the achievements of artists and cultural figures whose leadership has inspired inclusive and sustainable change. The award was introduced in 1995 at the initiative of the Forum’s friend, the late Lord Yehudi Menuhin.

Marin Alsop

For her leadership in championing diversity in music

Marin Alsop, Music Director of the Baltimore Symphony since 2007, is one of the greatest conductors of our time. Earlier this year she was the first woman to be appointed Chief Conductor of the Vienna Radio Symphony Orchestra and, in 2013, was the first woman in 118 years to conduct the BBC’s “Last Night of the Proms”. She has tirelessly endeavoured to provide opportunities for all people to access music towards a world where diversity in classical music is the norm rather than the exception. In Baltimore, she launched the “OrchKids” programme to serve the city’s less privileged children, and the BSO Academy and Rusty Musicians for adult amateur musicians. She is also Music Director of the São Paulo Symphony Orchestra. A graduate of Yale University and a MacArthur Fellow (2005), at the Annual Meeting she will lead the Opening Performance with the Taki Concordia Orchestra.

“Attending the World Economic Forum Annual Meeting in 2006 inspired me to strive to become a more engaged world citizen, and I am deeply honoured to return to accept the Crystal Award and share my journey during these past 13 years.”
Haifaa Al-Mansour
For her leadership in cultural transformation in the Arab world

Haifaa Al-Mansour is the first female filmmaker in Saudi Arabia. “Wadjda”, Al-Mansour’s feature debut, was the first feature film shot entirely in Saudi Arabia and the first by a female director. The breakthrough success of her 2005 documentary “Women Without Shadows” initiated a new wave of Saudi filmmakers and front-page headlines of Saudi Arabia finally opening cinemas in the kingdom. She was recently appointed to the Board of the General Authority for Culture to advise on the development of the cultural and arts sectors in Saudi Arabia. She recently released “Mary Shelley”, starring Elle Fanning, and “Nappily Ever After”, starring Sanaa Lathan. Al-Mansour is the first artist from the Arabian Gulf region to be invited to join the Academy of Motion Picture Arts and Sciences.

“I hope this award gives encouragement to women everywhere who want to break from tradition, and who want to be who they are without fear of being judged. That is a quality we need to cultivate as women, because we are still vulnerable when it comes to not being accepted. This award shows the value of stepping out of line, and taking a chance to go after our dreams and what we believe in.”

Sir David Attenborough
For his leadership in environmental stewardship

Sir David Attenborough’s broadcasting career spans six decades. He has played an extraordinary role in both reinventing and developing the medium of television, and in connecting people to the wonders of the natural world, bringing distant peoples, animals and habitats into living rooms across the planet. As a BBC producer and executive, he has played a crucial part in creating new forms of programming and scheduling that, to this day, influence global broadcasting. His work includes many iconic productions, from the ground-breaking “Zoo Quest” series to landmark programmes including “Life on Earth”, “The Living Planet”, “The Trials of Life”, “The Private Life of Plants”, “Life of Mammals” and “Planet Earth”. In Davos, Attenborough presented key sequences from “Our Planet”, a new series focusing on the preservation of life on Earth.

“I have always been fascinated by nature and have endeavoured to share my enthusiasm with as many people as possible through television. Never has an understanding of the natural world been so important to ensure a safe future for our planet.”
More than 1 billion people are living with a disability, according to the World Health Organization. And any one of us can acquire a disability at any time. So, how can we ensure that those with disabilities are heard?

ACCESS+ABILITY is an exhibition of some of the most ingenious designs made by and with people with disabilities. It demonstrates how designing for inclusion spurs innovation and benefits everyone. We hope that you returned home from Davos inspired and willing to engage in a dialogue on how your organization and community can become more accessible and truly inclusive.

Exhibition samples:

**Tobii Dynavox I-15+ with Grid 3**
This portable eye-tracking and speech-generating tool is designed for people with reduced ability to speak and communicate and who are learning eye-gaze skills. Rather than using one’s hands for input, one’s eyes become a “pointer” aimed at a monitor to type and send emails, edit videos, control doors and lights, etc. Designed and manufactured by Tobii AB.

**Velcro® Wallcovering**
Pratt Institute design student Braden Young developed Velcro® Wallcovering to provide easily visible storage for common objects – remote controls, pill bottles, eyeglasses – for people with Alzheimer’s. One of the patterns is inspired by 1950s design, a period that might still be familiar in a person’s long-term memory today.
**Dot Watch**
The Dot Watch has a dynamic Braille pin display. It shows time in Braille mode (with traditional Braille numbers) and tactile mode (for non-Braille readers). The Dot Watch can also receive text messages in Braille from a smartphone. Designed by cloudandco.

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**Men’s Lebron Soldier XII FlyEase**
FlyEase was inspired by Matthew Walzer, a teenager with cerebral palsy who wanted to be able to put on a pair of shoes by himself. Walzer wrote to Nike and described the challenge of tying his shoelaces. Its solution was a shoe with a wrap-around zipper system that allows easy entry and exit of the foot from the back, rather than from above. FlyEase can be worn by people of many abilities. Invented by Tobie Hatfield and designed by Jason Petrie.

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**SoundShirt and Sound Miniskirt**
SoundShirt translates the experience of listening into a physical and sensory experience for people who are deaf or hard of hearing. Sixteen sensors corresponding to each section of the orchestra are embedded into the fabric of a specially designed shirt. When activated, music becomes a tactile sensation. Designed by Francesca Rosella and Ryan Genz for CuteCircuit.

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**ACCESS+ABILITY**
Originally organized by Cooper Hewitt, Smithsonian Design Museum, this adaptation is a collaboration between the Smithsonian Institution and the World Economic Forum. It was designed in consultation with Pro Infirmis, the leading Swiss agency for the support and inclusion of people with disabilities.
Installations

Large-scale, immersive and interactive installations inside and outside the Congress Centre helped us see in new ways and with more clarity some of the most pressing issues the world faces.

Finding Hope

This monumental, site-specific installation is a response by Iranian artist Mehdi Ghadyanloo to the Annual Meeting’s theme of Globalization 4.0. Entitled Finding Hope, its surrealist vision offers an evocative reminder of our need to eschew simplistic narratives and engage with the myriad complexities of our global society.

Ghadyanloo is Iran’s foremost public artist. He is known for his utopian and philosophical paintings that explore universal human emotions such as fear, hope and loss. Through the portrayal of minimalist environments, surreal architectural arrangements and the repeated use of symbolic motifs such as stairs, balloons and aeroplanes, Ghadyanloo invites us to consider the shared universality of our existence.
Tree VR

What is it like to be a tree?

The award-winning Tree VR is an invitation to enter the Peruvian Amazon and become a tree. With your arms as branches and your body as the trunk, you experience the tree’s growth from a seedling into its fullest form and witness its fate first-hand in this 10-minute multisensory virtual reality experience.

With Tree VR, film directors Milica Zec and Winslow Porter merge art and technology into a ground-breaking and emotional experience that pushes the boundaries of both storytelling and our relationship with the natural world.

Cartooning for Peace – Davos Edition

Cartoons usually amuse us, but they can also persuade us or make us think; which is not always welcome around the world. This exhibition, specially curated for the Annual Meeting 2019, includes the works of cartoonists from Algeria, Austria, Canada, Cuba, France, Iran, Italy, Mexico, Switzerland, Syria and the United States. They are members of Cartooning for Peace, a network of 184 artists from 64 countries dedicated to defending freedom of speech in the spirit of dialogue.

Through the art and humour of the cartoons selected for this exhibition, there was reflection on some of the thorny issues and cultural taboos that come between us and our ability to make a “Globalization 4.0” more inclusive and sustainable.

*Developed in collaboration with Cartooning for Peace and its Vice-Chair, the Swiss cartoonist Patrick Chappatte.*
Wildlife Photographer of the Year – On Tour in Davos

Produced by the Natural History Museum in London, the venerated Wildlife Photographer of the Year competition showcases the world’s best nature photography and photojournalism. The images celebrate the wonder of the natural world while reminding us of its fragility and our crucial role in its protection. The 100 images presented as a projection mapping installation in the Gallery were selected in 2018 by an esteemed panel of judges who reviewed more than 45,000 entries from 95 countries. Each image is accompanied by the story behind it, revealing fascinating animal behaviour and the great lengths to which the photographers have gone to capture the perfect shot. Experience the beauty and variety of nature and the artistry, vision and technical excellence of those who record it.

The installation was designed by Zsolt Balogh for New Visual Paradigm.
Realizing that conventional healthcare would never suffice to fill the immense need for mental health services in Zimbabwe where he is one of just 12 psychiatrists for more than 16 million people, Dixon Chibanda had the transformative idea of turning to grandmothers – traditionally loved, respected and revered in the community.

Chibanda recognized that they were not just terrific listeners but also, with training and resources, could provide appropriate and effective support. The success of the Friendship Bench programme, which has been proven through clinical trials, has led to plans to replicate it in other countries around the world to enhance mental well-being and improve quality of life in communities. Come and meet Chibanda, sit on the bench yourself, spread the word and join the conversation by learning about how low-cost, scalable and effective interventions could enhance mental well-being for millions of people.

In collaboration with Dixon Chibanda, Founder of the Friendship Bench programme.

The Friendship Bench
To balance out your relentless Davos schedule of bilateral meetings and sessions, we offered – for the third year running – a series of retreats to allow you to return to fundamentals, connect with like-minded people and gain a new perspective on life.

The half-day retreat or a special dinner experience at the Base Camp, a rustic Swiss chalet located atop Rinerhorn mountain, was a world away from the hustle and bustle of the Congress Centre.

The retreat series is hosted in collaboration with the Greater Good Science Center at the University of California, Berkeley.

Meaningful Life: Discovering Happiness
Happiness is contagious, and research has shown that it also makes us more productive, responsive and healthier individuals. Together with leading experts discover what science-based activities can sharpen one’s sense of purpose and meaning, essential pillars to cultivating happiness.

Tuesday 22 January, 14.00 - 17.50
Friday 25 January, 08.30 - 12.20

Meaningful Life: Harnessing Stress
It is no secret that stress can be toxic to health and performance, but did you know that there are types of short-term stress that can also be healthy? Discover the science behind stress and the practices to harness it that can increase your vitality, joy and longevity.

Wednesday 23 January, 14.00 - 17.50
Thursday 24 January, 08.30 - 12.20

Meaningful Life: Contemplating Meditation
Realizing the full potential of meditation requires unpacking the science, experiencing it, and developing a roadmap to apply it into everyday life. Unravel the mysteries behind meditation and how to apply practices in work and home life.

Wednesday 23 January, 08.30 - 12.20
Thursday 24 January, 14.00 - 17.50

Sensory Dinner in the Dark
Join a dinner in total darkness for a powerful, collective experience where surprises and sensory alteration may well transform what you think you know about yourself and others.

Hosted in collaboration with Sight of Emotion.

Tuesday 22 January, 19.15 - 22.50
Wednesday 23 January, 19.15 - 22.50
Thursday 24 January, 19.15 - 22.50
William H. Gates III in the session Financial Innovation for Global Health Interactive Panel

Cyril M. Ramaphosa, President of Africa and Paul Kagame, President of Rwanda in the Annual Meeting of the New Champions 2019 Dalian Reception

Heather Koldewey in the session The Big Picture on Our Oceans

Sharan Burrow in the session A Jobs Creation Strategy for the Fourth Industrial Revolution
Co-Chairs

It’s time to be uncomfortable and bold. The real success is not measured by the amount of meetings but by the real impact on people on the ground.

Noura Berrouba, Member of the Governing Body, European Youth Parliament

One of the things I want to do is show how we have to change the education system – do a revolution in education.

Juan David Aristizabal, President and Co-Founder, Los Zúper, Colombia

My mission is to make sure we invest sustainable and green.

Basima Abdulrahman, Founder and Chief Executive Officer, KESK Green Building Consulting, Iraq

We need to drive a more sustainable and equitable global architecture. That should be our priority.

Julia Luscombe, Director, Strategic Initiatives, Feeding America, USA
Think about those of us who are on the sidelines, watching and not asking for much, just looking for a place to call home.

Mohammed Hassan Mohamud, Zonal Chairman, Kakuma, Kenya

Let’s challenge the status quo with innovation and ingenuity.

Satya Nadella, Chief Executive Officer, Microsoft Corporation, USA

Globalization 4.0 needs to start from localization.

Akira Sakano, Chair, Board of Directors, Zero Waste Academy Japan, Japan
Programme in brief

Global Dialogues

Geopolitics and a multiconceptual world
Future of the economy
Financial and monetary systems
Industry systems
Technology policy
Cybersecurity
Risk resilience
Human capital
New societal narrative
Institutional reform
Economic cooperation

Monday
21 January

18.00 - 18.30 Award Ceremony
The 25th Crystal Awards

Hilde Schwab, Chairperson and Co-Founder, Schwab Foundation for Social Entrepreneurship, Switzerland
Marin Alsop, Conductor, Intermusica Artists’ Management, United Kingdom; Cultural Leader
Sir David Attenborough, Broadcaster and Naturalist, David Attenborough, United Kingdom; Cultural Leader
Haifaa Al Mansour, Independent Filmmaker, Saudi Arabia; Cultural Leader

18.30 - 19.30 Concert
Opening Concert

Marin Alsop, Conductor, Intermusica Artists’ Management, United Kingdom; Cultural Leader

19.30 - 21.30 Reception
Welcome Reception

Tuesday
22 January

08.30 - 09.00 Hub Session
Ask About: Smarter Drug Design

Constantinos Demetriades, Research Group Leader, Max Planck Institute for Biology of Ageing, Germany

08.30 - 09.15 Betazone
Designing for Everyone

Caroline Baumann, Director, Cooper Hewitt, Smithsonian Design Museum, USA; Cultural Leader
Sinéad Burke, Founder, Sinéad Burke, Ireland; Cultural Leader
Susannah Rodgers, Paralympian and Director, Spirit of 2012, United Kingdom; Young Global Leader, Cultural Leader

08.30 - 09.30 Interactive Panel
Restoring Trust and Integrity

Ramesh Abhishek, Secretary of Industrial Policy and Promotion of India
Delia Ferreira Rubio, Chair, Transparency International, Argentina
Sergio Moro, Minister of Justice and Public Security of Brazil
Brian Peccarelli, Chief Operating Officer, Customer Markets, Thomson Reuters, Canada
Mark Pieth, Chairman of the Board, Basel Institute on Governance, Switzerland
Ramya Krishnaswamy, Head of Partner Engagement Management, Europe & North America & PACI, Member of the Executive Committee, World Economic Forum, Switzerland
David Agranovich, Threat Disruption Lead, Facebook, USA

08.30 - 09.30 Interactive Panel
Strategic Outlook on Energy

Fatih Birol, Executive Director, International Energy Agency, Paris
Iain Conn, Group Chief Executive, Centrica, United Kingdom
Jean-Pascal Tricoire, Chairman and Chief Executive Officer, Schneider Electric, France
Zhang Jianhua, Minister of Energy of the People’s Republic of China
Katherine Hamilton, Director, Project for Clean Energy and Innovation, USA

Haslinda Amin, Chief International Correspondent, South-East Asia, Bloomberg News, Singapore
Maha Eltobgy, Head of Investors Industries; Member of the Executive Committee, World Economic Forum

08.30 - 09.30 Interactive Panel
The Geopolitical Agenda

Yoichi Funabashi, Chairman, Asia Pacific Initiative, Japan
Karin von Hippel, Director-General, Royal United Services Institute for Defence and Security Studies, United Kingdom
Kishore Mahbubani, Senior Adviser and Professor in the Practice of Policy, National University of Singapore, Singapore
Yan Xuetong, Dean, Institute of International Relations, Tsinghua University, People’s Republic of China
Vall R. Nasr, Dean and Professor of International Relations, Paul H. Nitze School of Advanced International Studies (SAIS), Johns Hopkins University, USA

08.30 - 09.30 Interactive Panel
Future Frontiers of Global Value Chains

Bhairavi Jani, Executive Director, SCA Group of Companies, India; Young Global Leader
Jun Ni, Shien-Ming Wu Collegiate Professor of Manufacturing Science; Honorary Dean, UM-SJTU Joint Institute, University of Michigan, USA
Douglas L. Peterson, President and Chief Executive Officer, S&P Global, USA
Bogolo Joy K Stewart, Minister of Investment, Trade and Industry of Botswana
Anascha Gonzalez Laya, Executive Director, International Trade Centre (ITC), Geneva

09.00 - 10.30 Open Forum
Water for Life

Ernst Bromeli, Water Ambassador, The Blue Miracle, Switzerland
Susan Goldberg, Editorial Director, National Geographic Partners, USA
### Tuesday 22 January

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<tr>
<th>09.15 - 09.45 Hub Session</th>
<th>World in Transformation: Virtual and Augmented Reality</th>
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<tr>
<td><strong>Jodi Halpern,</strong> Professor of Bioethics and Medical Humanities, University of California, Berkeley, USA</td>
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<td><strong>Sandra Lopez,</strong> Advisory Board Executive, Women in Sports Technology, USA</td>
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<td><strong>Heather Koldewey,</strong> Fellow, National Geographic Society, USA</td>
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<td><strong>Jim Leape,</strong> William and Eva Price Senior Fellow, Woods Institute; Co-Director, Center for Ocean Solutions, Stanford University, USA</td>
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<td><strong>Gabriel O’Donnell,</strong> Principal Research Programmer, CMU CREATE Lab, Carnegie Mellon University, USA</td>
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<th>Ask About: AI Scientists</th>
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<td><strong>Marin Soljacic,</strong> Professor of Physics, Massachusetts Institute of Technology, USA; Young Global Leader</td>
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<th>09.15 - 10.00 Interactive Panel</th>
<th>Social Innovation Outlook</th>
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<td><strong>Vivek Maru,</strong> Chief Executive Officer, Namati, USA</td>
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<td><strong>Oana Toiu,</strong> Founder, Social Innovation Solutions, Romania</td>
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<td><strong>Kyle Zimmer,</strong> President and Chief Executive Officer, First Book, USA</td>
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<td><strong>Ernest Darkoh,</strong> Founding Partner and Co-Chief Executive Officer, BroadReach Healthcare, South Africa</td>
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<th>09.30 - 10.00 Exhibit</th>
<th>Behind the Idea: The Friendship Bench</th>
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<td><strong>Dixon Chibanda,</strong> Director, African Mental Health Research Initiative (AMARI), Zimbabwe</td>
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<th>09.30 - 10.45 xChange</th>
<th>A New Dialogue for Food</th>
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<td><strong>Ajay Vir Jakhar,</strong> Chairman, Bharat Krishak Samaj (Farmers’ Forum India), India</td>
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<td><strong>Neal Keny-Guyer,</strong> Chief Executive Officer, Mercy Corps, USA</td>
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<td><strong>David Nabarro,</strong> Director, 4SD, Switzerland</td>
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<td><strong>David Perry,</strong> President and Chief Executive Officer, Indigo Agriculture, USA</td>
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<td><strong>Gunhild Anker Stordalen,</strong> Founder and Executive Chair, EAT Foundation, Norway; Young Global Leader</td>
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<td><strong>Gilbert Fossou Houngbo,</strong> President, International Fund for Agricultural Development (IFAD), Rome</td>
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<td><strong>Andrea Illy,</strong> Chairman, illycaffè, Italy</td>
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<td><strong>Naoko Ishii,</strong> Chief Executive Officer and Chairperson, Global Environment Facility, Washington DC</td>
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<td><strong>Susan Jebb,</strong> Professor of Diet and Population Health, Oxford Martin School, University of Oxford, United Kingdom</td>
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<td><strong>Mariam Mohammed Saeed Hareb Al Mehairi,</strong> Minister of State for Food Security of the United Arab Emirates</td>
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<td><strong>Charlotte Pera,</strong> President, ClimateWorks Foundation, USA</td>
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<td><strong>Seán de Cleeve,</strong> Head of Future of Food; Member of the Executive Committee, World Economic Forum</td>
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<td><strong>Jane Nelson,</strong> Director, Corporate Responsibility Initiative, Harvard Kennedy School of Government, USA</td>
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<th>09.30 - 10.45 IdeasLab</th>
<th>The Neuroscience of Happiness with Yale University</th>
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<tr>
<td><strong>Molly Crockett,</strong> Assistant Professor of Psychology, Yale University, USA; Young Global Leader</td>
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<td><strong>Hedy Kober,</strong> Associate Professor of Psychiatry and Psychology, Yale University, USA</td>
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<td><strong>Laurie Santos,</strong> Professor of Psychology; Head, Silliman College, Yale University, USA</td>
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<td><strong>Peter Salovey,</strong> President, Yale University, USA</td>
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<td><strong>Tim Brown,</strong> Chief Executive Officer, IDEO, USA</td>
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<th>09.45 - 10.45 Interactive Panel</th>
<th>Theory of the Firm in a World of Digital Ecosystems</th>
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<td><strong>Julian Birkinshaw,</strong> Professor of Strategic and International Management, London Business School, United Kingdom</td>
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<td><strong>Hanzade Dogan Boyner,</strong> Chairwoman, Hepsiburada, Turkey</td>
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<td><strong>Michal Krupinski,</strong> Chief Executive Officer, Bank Pekao, Poland; Young Global Leader</td>
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<td><strong>Jabu A. Mabuza,</strong> Chairman, Telkom, South Africa</td>
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<td><strong>Andrew Thompson,</strong> Co-Founder and Chief Executive Officer, Proteus Digital Health, USA</td>
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<td><strong>N. V. (Tiger) Tyagarajan,</strong> President and Chief Executive Officer, Genpact International, USA</td>
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<td><strong>Martin Brudermüller,</strong> Chairman of the Board of Executive Directors and Chief Technology Officer, BASF, Germany</td>
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<td><strong>Sharan Burrow,</strong> General Secretary, International Trade Union Confederation (ITUC), Belgium</td>
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Rodrigo Malmierca, Minister of Foreign Trade and Foreign Investment of Cuba
Dion Weisler, President and Chief Executive Officer, HP, USA
Melonee Wise, Chief Executive Officer, Fetch Robotics, USA
Subra Suresh, President, Nanyang Technological University (NTU), Singapore
Helena Leurent, Head of Advanced Manufacturing and Production, Member of Executive Committee, World Economic Forum

09.45 - 10.45 Televised Session
Rethinking Global Financial Risk
Ray Dalio, Founder, Chairman and Co-Chief Investment Officer, Bridgewater Associates, USA
Fang Xinghai, Vice-Chairman, China Securities Regulatory Commission, People’s Republic of China
Jin Keyu, Professor of Economics, London School of Economics and Political Science, United Kingdom; Young Global Leader
Axel A. Weber, Chairman of the Board of Directors, UBS, Switzerland
Maria Bartiromo, Anchor and Global Markets Editor, Fox Business Network, USA; Young Global Leader

09.45 - 10.45 Interactive Panel
Strategic Outlook on the Digital Economy
Eileen Donahoe, Executive Director, Global Digital Policy Incubator, USA
Ken Hu, Deputy Chairman and Rotating Chairman, Huawei Technologies, People’s Republic of China
Alfred F. Kelly Jr, Chief Executive Officer, Visa, USA
Abidali Neemuchwala, Chief Executive Officer, Wipro, India
Rajeev Suri, President and Chief Executive Officer, Nokia Corporation, Finland
Victoria A. Espinel, President and Chief Executive Officer, BSA - The Software Alliance, USA
Derek O’Halloran, Head of Digital Economy and Society System Initiative; Member of the Executive Committee, World Economic Forum

10.00 - 10.30 Interactive Panel
The State of Public Opinion
Kumi Naidoo, Secretary-General, Amnesty International, United Kingdom; Young Global Leader
Lauren Woodman, Chief Executive Officer, NetHope, USA
Oliver Cann, Head of Strategic Communications; Member of the Executive Committee, World Economic Forum

10.15 - 10.45 Hub Session
World in Transformation: Biotechnology
Lee Sang-Yup, Distinguished Professor and Dean, Korea Advanced Institute of Science and Technology (KAIST), Republic of Korea

10.15 - 10.45 Hub Session
The Big Picture on Globalization
Ian Goldin, Professor of Globalization and Development; Director, Oxford Martin Programme on Technological and Economic Change, Oxford Martin School, University of Oxford, United Kingdom
Ililah Nourbakhsh, Professor, Robotics Institute, Carnegie Mellon University, USA

10.00 - 11.00 Interactive Panel
Strategic Outlook on Consumption
Alan Jope, Chief Executive Officer, Unilever, United Kingdom
David W. MacLennan, Chairman and Chief Executive Officer, Cargill, USA
Doug McMillon, President and Chief Executive Officer, Walmart, USA
Steve Rusckowski, Chairman, President and Chief Executive Officer, Quest Diagnostics, USA
Orit Gadiesh, Chairman, Bain & Company, United Kingdom
Zara Ingilizian, Head of Consumer Industry and System Initiative; Member of the Executive Committee, World Economic Forum

10.00 - 11.00 Interactive Panel
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Orit Gadiesh, Chairman, Bain & Company, United Kingdom
Zara Ingilizian, Head of Consumer Industry and System Initiative; Member of the Executive Committee, World Economic Forum

10.15 - 10.45 Hub Session
Ask About: Information Privacy
Carmela Troncoso, Assistant Professor, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland
Tuesday 22 January

10.15 - 11.00 Interactive Panel
**Last-Mile Learning**

Emmanuel Gamor, Entrepreneur, Kanaa - EdTech, South Africa
Jane Hunt, Chief Executive Officer, The Front Project, Australia
Sudarshan Mahajan, Founder, Tiny Monkey Stage, India
Asheesh Advani, President and Chief Executive Officer, JA Worldwide, USA

10.30 - 11.00 Betazone
**Radically Reinventing Social Systems**

Hilary Cottam, Author and Entrepreneur, Centre for the Fourth Social Revolution, United Kingdom; Young Global Leader
Peter Wolodarski, Editor-in-Chief, Dagens Nyheter, Sweden

11.00 - 11.20 Plenary Session
**Welcoming Remarks and Special Address**

Ueli Maurer, President of the Swiss Confederation 2019 and Federal Councillor of Finance of Switzerland
Klaus Schwab, Founder and Executive Chairman, World Economic Forum

12.00 - 13.00 Hub Session
**Ask About: Micro-Surgical Robotics**

Kanako Harada, Associate Professor, University of Tokyo, Japan

12.00 - 13.00 Interactive Panel
**Peace and Reconciliation in a Multipolar World**

Abdullah Abdullah, Chief Executive of the Islamic Republic of Afghanistan
Gebran Bassil, Minister of Foreign Affairs and Emigrants of Lebanon
Sigrid Kaag, Minister for Foreign Trade and Development Cooperation of the Netherlands
Abdelkader Messahel, Minister of Foreign Affairs of Algeria
Mohammed Bin Abdulrahman Al Thani, Deputy Prime Minister and Minister of Foreign Affairs of Qatar
Robin Niblett, Director, Chatham House, United Kingdom

12.30 - 13.00 Hub Session
**Voice for the Planet**

Manuel Pulgar-Vidal Otalora, Leader, Climate and Energy Practice, WWF International, Switzerland
Akira Sakano, Chair, Board of Directors, Zero Waste Academy Japan, Japan

12.30 - 14.00 Experience
**A Day in the Life of a Refugee**

12.30 - 14.00 Open Forum
**Plastic Pollution: An End in Sight?**

Yi Hsin Cathy Chen, Senior Policy Adviser, Natural Resources Canada
Gloria Fluxa Thienemann, Vice-Chairman and Chief Sustainability Officer, Iberostar Group, Spain; Young Global Leader
Heather Koldewey, Fellow, National Geographic Society, USA
Tom Szaky, Founder and Chief Executive Officer, TerraCycle, USA; Young Global Leader
Peter Thomson, United Nations Secretary-General’s Special Envoy for the Ocean, New York
Urs Gredig, Editor-in-Chief, CNNMoney Switzerland, Switzerland

12.30 - 14.00 Lunch Session
**Nurturing a Positive Research Culture**

Lawrence S. Bacow, President, Harvard University, USA
Jean-Pierre Bourguignon, President, European Research Council, Brussels
Carol Christ, Chancellor, University of
12.30 - 14.00 Lunch Session
Asia’s Digital Age

Anindya Novyan Bakrie, Executive Chairman, Bakrie & Brothers, Indonesia
Anna Fang, Partner and Chief Executive Officer, ZhenFund, People’s Republic of China; Young Global Leader
Pichet Durongkaveroj, Minister of Digital Economy and Society of Thailand
Akshay Sabhikhi, Chief Executive Officer, CognitiveScale, USA
Shailendra Singh, Managing Director, Sequoia Capital India, Singapore
Mark Wu, Stimson Professor of Law, Harvard Law School, USA
Justin Wood, Head of Regional Strategies, Asia-Pacific; Member of the Executive Committee, World Economic Forum

12.30 - 14.00 Lunch Session
Innovating for the Global Goals

Matt Barnard, Chief Executive Officer, Plenty, USA
Elaine J. Dorward-King, Executive Vice-President, Sustainability and External Relations, Newmont Mining Corporation, USA
José Manuel Entrecanales Domecq, Chairman and Chief Executive Officer, Acciona, Spain
Rashad-Rudolf Kaldany, Partner; Chief Investment Officer, BlueOrange Capital, USA
Peter Laugharn, President and Chief Executive Officer, Conrad N. Hilton Foundation, USA
Viola Llewellyn, Co-Founder and President, Ovamba Solutions, USA
Jens Martin Skibsted, Partner, Skibsted Ideation, Denmark; Young Global Leader
Soumitra Dutta, Professor of Management, Samuel Curtis Johnson Graduate School of Management, Cornell University, USA
Terri Toyota, Deputy Head of the Centre for Global Public Goods, Member of the Executive Committee, World Economic Forum

12.30 - 14.00 Lunch Session
Living, Learning and Earning Longer

Cai Fang, Vice-President, Chinese Academy of Social Sciences (CASS), People’s Republic of China
Roger Crandall, Chairman, President and Chief Executive Officer, Massachusetts Mutual Life Insurance Company, USA
Jo Ann Jenkins, Chief Executive Officer, AARP, USA
Julio Portalatin, President and Chief Executive Officer, Mercer (MMC), USA
Alexander R. Wynaendts, Chief Executive Officer and Chairman of the Executive Board, Aegon, Netherlands
Lynda Gratton, Professor of Management Practice, London Business School, United Kingdom

12.30 - 14.00 Lunch Session
Activism 4.0

Aria Finger, Chief Executive Officer, DoSomething.org, USA; Young Global Leader
Brian Gallagher, President and Chief Executive Officer, United Way Worldwide, USA
Rachel Haas, Managing Director, NO MORE, USA
Debbie Stothard, Secretary-General, International Federation for Human Rights (FIDH), France
Haley Sweetland Edwards, National Correspondent, Time, USA

13.30 - 14.00 Issue Briefing
Nuclear Brinksmanship

William Burns, President, Carnegie Endowment for International Peace, USA
Angela Kane, Senior Fellow, Vienna Center for Disarmament and Non-Proliferation, Austria
Philip Shetler-Jones, Programme Lead, Geopolitics and International Security, World Economic Forum

13.30 - 14.00 Hub Session
Data Policy: Localized Strategies for Global Technologies

S Iswaran, Minister for Communications and Information; Minister-in-Charge of Trade Relations of Singapore
Anne Toth, Head of Technology Policy and Partnerships; Member of the Executive Committee, World Economic Forum
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22 January

13.30 - 14.00 Hub Session
Ask About: Preventing Outbreaks
Wendy Barclay, Action Medical Research Chair, Virology, Imperial College London, United Kingdom

13.30 - 14.00 Hub Session
The Big Picture on a Hothouse Earth
Johan Rockström, Director, Potsdam Institute for Climate Impact Research (PIK), Germany
Randy Sargent, Senior Systems Scientist, Carnegie Mellon University, USA

13.30 - 14.15 Betazone
Close Encounters with Jane Goodall and Skye Meaker
Jane Goodall, Founder, Jane Goodall Institute, USA
Skye Meaker, Photographer, Skye Meaker Photography, South Africa; Cultural Leader
Susan Goldberg, Editorial Director, National Geographic Partners, USA

13.45 - 15.00 Workshop
The Factory of the Future
Ignatius Darell Leiking, Minister of International Trade and Industry of Malaysia
Natan Linder, Chief Executive Officer, Tulip Interfaces, USA
Michael Süss, Chairman, Oerlikon Management, Switzerland
Melonee Wise, Chief Executive Officer, Fetch Robotics, USA
Thachat Viswanath Narendran, Chief Executive Officer and Managing Director, Tata Steel, Tata Sons, India
Peter Zemsky, Deputy Dean; Dean of Innovation, INSEAD, France
Helena Leurent, Head of Advanced Manufacturing and Production, Member of Executive Committee, World Economic Forum

13.45 - 15.00 xChange
A New Agenda for Europe
David Loew, Executive Vice-President; Head, Sanofi Pasteur, Sanofi, France
Marijette Schaalke, Member of the European Parliament, European Union; Young Global Leader
Pawel Surwoka, Chief Executive Officer, PZU, Poland
Noura Berrouba, Member of the Governing Body, European Youth Parliament
Ulrike Guérot, Professor and Director, Department for European Policy and the Study of Democracy, Danube University Krems, Austria
Jennifer Morgan, Executive Director, Greenpeace International, Netherlands
Alexander Stubb, Vice-President and Member of the Management Committee, European Investment Bank, Luxembourg; Young Global Leader
Karl-Petter Thorwaldsson, President, Swedish Trade Union Confederation, Sweden
Mark Vernooij, Partner, THNK School of Creative Leadership, Netherlands

14.00 - 15.00 Interactive Panel
Strategic Outlook on South Asia
Abdullah Abdullah, Chief Executive of the Islamic Republic of Afghanistan
Sigve Brekke, President and Chief Executive Officer, Telenor Group, Norway
Raghu Ram Rajan, Katherine Dusak Miller Distinguished Service Professor of Finance, University of Chicago Booth School of Business, USA
K P Sharma Oli, Prime Minister of Nepal
Mari Elka Pangestu, Professor of International Economics, University of Indonesia

14.00 - 14.45 Interactive Panel
Behind the Artist’s Idea: Cartooning for Peace
Patrick Chappatte, Editorial Cartoonist & Founder, Globe Cartoon, Switzerland; Young Global Leader, Cultural Leader
Kenneth Roth, Executive Director, Human Rights Watch, USA

14.00 - 15.00 Interactive Panel
Advancing the Belt and Road Initiative: China’s Trillion-Dollar Vision
Ilham Aliyev, President of the Republic of Azerbaijan
Heng Swee Keat, Minister for Finance of Singapore
Wang Yongqing, Vice-Chairman, All-China Federation of Industry and Commerce (ACFIC), People’s Republic of China
14.00 - 15.00 Televised Session

**Media Freedom in Crisis**

- **Xu Niansha**, Chairman, Poly Group, People’s Republic of China
- **Tian Wei**, Host, World Insight with Tian Wei, China Global Television Network (CGTN), People’s Republic of China

14.00 - 15.00 Interactive Panel

**Future Frontiers of Technology Control**

- **Martin Baron**, Executive Editor, Washington Post, USA
- **Matthew Caruana Galizia**, Director, Daphne Caruana Galizia Foundation, Malta
- **Tinatin Kandelaki**, General Producer, Match TV, Russian Federation
- **Kumi Naidoo**, Secretary-General, Amnesty International, United Kingdom
- **Aleksandar Vučić**, President of Serbia
- **Stephen J. Adler**, Editor-in-Chief, Reuters, Canada

14.00 - 15.00 Interactive Panel

**Shaping a New Skills Architecture**

- **Alice Bunn**, Director, International, UK Space Agency, United Kingdom
- **Steven Ciobo**, Minister of Defence Industry of Australia
- **Frederick Kempe**, President and Chief Executive Officer, Atlantic Council, USA
- **Samir Saran**, President, Observer Research Foundation (ORF), India

14.00 - 15.00 Retreat

**Meaningful Life: Discovering Happiness**

- **Tsoknyi Rinpoche**, Founder, Pundarika Foundation, USA
- **Emiliana Simon-Thomas**, Director, Science, Greater Good Science Center, University of California, Berkeley, USA

14.15 - 14.45 Plenary Session

**A Conversation with Sir David Attenborough and HRH The Duke of Cambridge**

- **Sir David Attenborough**, Broadcaster and Naturalist, David Attenborough, United Kingdom
- **Klaus Schwab**, Founder and Executive Chairman, World Economic Forum

15.00 - 16.30 Open Forum

**Storytellers: The Road to Resilience**

- **Caroline Casey**, Founder, Binc, Ireland
- **Andria Zafirakou**, Teacher, Arts and Textile, Alperton Community School, United Kingdom
- **Platon**, Photographer and Founder, People’s Portfolio, USA

15.30 - 16.00 Plenary Session

**Special Address by Jair Bolsonaro, President of Brazil**

- **Jair Bolsonaro**, President of Brazil
- **Klaus Schwab**, Founder and Executive Chairman, World Economic Forum

15.00 - 16.30 Open Forum

**Storytellers: The Road to Resilience**

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16.00 - 16.30 Plenary Session

**Special Session with Michael Pompeo, Secretary of State of the United States**

- **Michael Pompeo**, Secretary of State of the United States
- **Børge Brende**, President; Member of the Managing Board, World Economic Forum

16.15 - 17.00 Betazone

**The Female Icon**

- **Rena Effendi**, Photographer, Turkey
- **Chiara Tilesi**, Founder and President of the Board of Directors, We Do It Together, USA
- **Laura Liswood**, Secretary-General, Council of Women World Leaders, USA
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16.15 - 17.00 Interactive Panel
Saving Lives through Environmental Action

Naoko Ishii, Chief Executive Officer and Chairperson, Global Environment Facility, Washington DC
Lin Boqiang, Dean, China Institute for Studies in Energy Policy, Xiamen University, People's Republic of China

Don攻坚战，President and Chief Executive Officer, Teck Resources, Canada
Christiana Figueres, Founding Partner, Global Optimism, United Kingdom

16.15 - 17.15 Interactive Panel
A New Day in Latin America

Mario Abdo Benítez, President of Paraguay
Carlos Alvarado Quesada, President of Costa Rica
Luis Alberto Moreno, President, Inter-American Development Bank, Washington DC
Lenin Moreno Garcés, President of Ecuador
Moisés Naim, Distinguished Fellow, Carnegie Endowment for International Peace, USA

16.15 - 17.15 Interactive Panel
Building Sustainable Markets

Niamh El Bassunie, Chief Executive Officer, WaystoCap, Morocco
Jesper Brodin, Chief Executive Officer, Ingka Group, Netherlands
Aron Cramer, President and Chief Executive Officer, Business for Social Responsibility (BSR), USA
Anne Finucane, Chairman of the Board, Bank of America Merrill Lynch, Europe; Vice-Chairman, Bank of America, USA

16.15 - 17.15 Interactive Panel
Investing in Fragile Contexts

Kristalina Georgieva, Chief Executive Officer, World Bank, Washington DC
Peter Maurer, President, International Committee of the Red Cross (ICRC), Geneva
David Miliband, President, International Rescue Committee, USA
Nicholas D. Kristof, Columnist, New York Times, USA

16.15 - 17.30 Interactive Panel
Redesigning Social Safety Nets

Rutger Bregman, Author and Historian, De Correspondent, Netherlands
Hilary Cottam, Author and Entrepreneur, Centre for the Fourth Social Revolution, United Kingdom; Young Global Leader
Richard W. Edelman, President and Chief Executive Officer, Edelman, USA
Troels Lund Poulsen, Minister for Employment of Denmark
Minouche Shafik, Director, London School of Economics and Political Science, United Kingdom

16.15 - 17.30 IdeasLab
The Dawn of Precision Psychiatry with Stanford University

Ada Poon, Associate Professor of Electrical Engineering, Stanford University, USA
Caroline Rodriguez, Assistant Professor, Stanford University, USA
Leanne Williams, Professor of Psychiatry and Behavioural Sciences, Stanford University, USA
Philip Campbell, Editor-in-Chief, Springer Nature, United Kingdom
16.30 - 17.00 Issue Briefing
Technology: A Common Good?
Guy Standing, Research Professor in Development Studies, University of London, United Kingdom
Sheila Warren, Project Head, Blockchain and Distributed Ledger Technology, World Economic Forum
Oliver Cann, Head of Strategic Communications; Member of the Executive Committee, World Economic Forum

16.45 - 17.15 Hub Session
The Big Picture on Women in the Workforce
Martina Cheung, President, S&P Global Market Intelligence, S&P Global, USA
Gabriel O’Donnell, Principal Research Programmer, CMU CREATE Lab, Carnegie Mellon University, USA

16.45 - 17.15 Hub Session
Ask About: Biohybrid Robotics
Shoji Takeuchi, Professor and Director, Center for International Research on Integrative Biomedical Systems, Institute of Industrial Science, University of Tokyo, Japan

17.00 - 17.45 Interactive Panel
Safeguarding Our Planet
Jacinda Ardern, Prime Minister of New Zealand; Young Global Leader
Sir David Attenborough, Broadcaster and Naturalist, David Attenborough, United Kingdom; Cultural Leader
Anand Mahindra, Chairman, Mahindra Group, India
Akira Sakano, Chair, Board of Directors, Zero Waste Academy Japan, Japan
Al Gore, Vice-President of the United States (1993-2001); Chairman and Co-Founder, Generation Investment Management, USA

17.15 - 17.45 Issue Briefing
The Rise of Techno Nationalism
John R. Allen, President, Brookings Institution, USA
Avril Haines, Senior Research Scholar, Columbia University, USA
Philip Shetler-Jones, Programme Lead, Geopolitics and International Security, World Economic Forum

17.30 - 18.00 One-on-One
Searching for Magic in Real Life: An Insight, An Idea with David Blaine
David Blaine, Magician, USA; Cultural Leader
Francine Lacqua, Editor-at-Large and Presenter, Bloomberg Television, United Kingdom

17.30 - 18.00 Hub Session
The Cybersecurity Workforce of Tomorrow
Jim Alkove, Executive Vice-President, Security, Salesforce.com, USA
Ken Xie, Founder, Chairman of the Board and Chief Executive Officer, Fortinet, USA

17.30 - 18.00 Hub Session
Ask About: Self-Healing Plastics
Takuzo Aida, Professor, Department of Chemistry and Biotechnology, University of Tokyo, Japan

17.30 - 18.45 xChange
Investing for the Long Haul
Jim Coulter, Co-Founder; Co-Chief Executive Officer, TPG, USA
Noreen Doyle, Chair of the Board of Directors, Newmont Mining Corporation, USA
Martin L. Flanagan, President and Chief Executive Officer, Invesco, USA
Mark Machin, President and Chief Executive Officer, CPP Investment Board (CPPIB), Canada
Jan du Plessis, Group Chairman, BT, United Kingdom
Sarah Williamson, Chief Executive Officer, FCLT Global, USA
Maha Eltobgy, Head of Investors Industries; Member of the Executive Committee, World Economic Forum

17.00 - 17.30 Exhibit
Behind the Idea: The Friendship Bench
Dixon Chibanda, Director, African Mental Health Research Initiative (AMARI), Zimbabwe

17.45 - 18.30 Screening
Special Screening: Our Planet
Marco Lambertini, Director-General, WWF International, Switzerland
Sir David Attenborough, Broadcaster and Naturalist, David Attenborough, United Kingdom; Cultural Leader
Al Gore, Vice-President of the United States (1993-2001); Chairman and Co-Founder, Generation Investment Management, USA
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17.45 - 18.45 Interactive Panel
Globalization: Retreat or Reinvention?

Frank Appel, Chief Executive Officer, Deutsche Post DHL, Germany
Sabine Keller-Busse, Group Chief Operating Officer, UBS, Switzerland
James T. Riady, Founder and Honorary Chairman, Siloam Hospitals Group, Lippo Group, Indonesia
Matthew K. Kaminski, Global Editor, Politico, Belgium
Richard Samans, Managing Director; Head of Policy and Institutional Impact, World Economic Forum

17.45 - 18.45 Interactive Panel
Strategic Outlook on the Middle East

Alain Bejjani, Chief Executive Officer, Majid Al Futtaim Holding, United Arab Emirates
Youssef Chahed, Prime Minister of Tunisia
Rami Hamdallah, Prime Minister of the Palestinian National Authority
Khalid Al Rumaihi, Chief Executive, Bahrain Economic Development Board, Bahrain
Mohammad Al Tuwaijri, Minister of Economy and Planning of Saudi Arabia
Hadley Gamble, Reporter and Anchor, CNBC, United Kingdom
Mirek Dusek, Deputy Head of Regional and Geopolitical Affairs; Member of the Executive Committee, World Economic Forum

17.45 - 18.45 Interactive Panel
Financial Innovation for Global Health

William H. Gates III, Co-Chair, Bill & Melinda Gates Foundation, USA
Tedros Adhanom Ghebreyesus, Director-General, World Health Organization (WHO), Geneva
Vasant Narasimhan, Chief Executive Officer, Novartis, Switzerland
Sania Nishtar, Founder and President, Heartfile, Pakistan
Ngosi Okonjo-Iweala, Chair, Gavi, the Vaccine Alliance, USA
Peter Sands, Executive Director, Global Fund to Fight AIDS, Tuberculosis and Malaria (GF), Geneva
Clifton Leaf, Editor-in-Chief, Fortune Magazine, USA

17.45 - 18.45 Interactive Panel
Business Leadership in the Fourth Industrial Revolution

Bill McDermott, Chief Executive Officer, SAP, Germany
Hiroaki Nakanishi, Executive Chairman, Hitachi, Japan
Ginni Rometty, Chairman, President and Chief Executive Officer, IBM Corporation, USA
David Taylor, Chairman of the Board, President and Chief Executive Officer, Procter & Gamble, USA
Roula Khalaf, Deputy Editor, Financial Times, United Kingdom

18.00 - 18.30 Issue Briefing
Promise and Peril: Mining Underwater

David Garofalo, President and Chief Executive Officer, Goldcorp, Canada
Douglas McCauley, Professor, University of California, Santa Barbara, USA
M. Sanjayan, Chief Executive Officer, Conservation International, USA
Oliver Cann, Head of Strategic Communications; Member of the Executive Committee, World Economic Forum

18.30 - 20.00 Open Forum
Averting ‘Peak Europe’

Ulrike Guérot, Professor and Director, Department for European Policy and the Study of Democracy, Danube University Krems, Austria
Insa Klasing, Co-Founder and Chief Executive Officer, TheNextWe, Germany; Young Global Leader
Roger Köppel, Member of the National Council, Swiss Parliament, Switzerland
Ivan Krastev, Chairman, Centre for Liberal Strategies, Bulgaria
Marietje Schaake, Member of the European Parliament, European Union; Young Global Leader
Alessandra Galloni, Global News Editor, Reuters, Canada; Young Global Leader

19.15 - 22.50 Dinner Session
Sensory Dinner in the Dark

Gina Badenoch, Founder, Capaxia, United Kingdom; Young Global Leader, Cultural Leader
20.00 - 22.00 Dinner Session

Doing the Impossible

David Blaine, Magician, USA; Cultural Leader
Heather Koldewey, Fellow, National Geographic Society, USA
Maria Konnikova, Author, USA
Ada Poon, Associate Professor of Electrical Engineering, Stanford University, USA
Susannah Rodgers, Paralympian and Director, Spirit of 2012, United Kingdom; Young Global Leader
James Rogers, Founder and Chief Executive Officer, Apeel Sciences, USA
Randall Lane, Chief Content Officer, Forbes, USA

20.00 - 22.00 Dinner Session

Bridging the Asian Demographic Divide

Henrietta H. Fore, Executive Director, United Nations Children's Fund (UNICEF), New York
Lynda Gratton, Professor of Management Practice, London Business School, United Kingdom
Huang Dinglong, Co-Founder and Chief Executive Officer, Malong Technologies, People's Republic of China
Grant Robertson, Minister of Finance of New Zealand
Rudiantara, Minister of Communication and Information Technology of Indonesia
Axton Salim, Director and Member of the Board, Indofood, Indonesia
David Sin, Co-Founder, Group President and Deputy Chairman, Fullerton Health, Singapore; Young Global Leader
Zhang Weiwei, Dean, China Institute, Fudan University, People’s Republic of China
Haslinda Amin, Chief International Correspondent, South-East Asia, Bloomberg News, Singapore

20.00 - 22.00 Dinner Session

The Next Big Idea in Economics?

Jin Keyu, Professor of Economics, London School of Economics and Political Science, United Kingdom; Young Global Leader
Raghuram G. Rajan, Katherine Dusak Miller Distinguished Service Professor of Finance, University of Chicago Booth School of Business, USA
Robert J. Shiller, Sterling Professor of Economics, Yale University, USA
Guy Standing, Research Professor in Development Studies, University of London, United Kingdom
Adam Tooze, Shelby Cullom Davis Chair of History, Columbia University, USA
Gerard Baker, Editor-at-Large, Wall Street Journal, USA
Cartooning for Peace

Skye Meaker in the Session Close Encounters with Jane Goodall and Skye Meaker

Sinéad Burke in the session Designing for Everyone
### Wednesday 23 January

#### Global Dialogues

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<td>Meditation</td>
<td>Tsoknyi Rinpoche, Founder, Pundarika Foundation, USA</td>
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<td>08.30 - 12.20</td>
<td>Retreat</td>
<td>Eve Ekman, Director, Training, Greater Good Science Center, University of California, Berkeley, USA; Hedy Kober, Associate Professor of Psychiatry and Psychology, Yale University, USA</td>
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<td>09.00 - 09.30</td>
<td>Betazone</td>
<td>Peter McBride, National Geographic Explorer, USA; Susan Goldberg, Editorial Director, National Geographic Partners, USA</td>
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<td>09.00 - 09.45</td>
<td>Interactive Panel</td>
<td>Rachel Botsman, Author and Trust Expert, United Kingdom; Maria Cristina Frias, Member of the Board and Columnist, Folha de São Paulo, Brazil; Pavlo Klimkin, Minister of Foreign Affairs of Ukraine; James Harding, Co-Founder and Editor, United Kingdom</td>
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#### Experience

<table>
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<tr>
<th>Time</th>
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<td>09.00 - 10.00</td>
<td>Interactive Panel</td>
<td>Building a Sustainable Crypto-Architecture</td>
<td>Jeremy Allaire, Founder and Chief Executive Officer, Circle, USA; Kenneth Rogoff, Thomas D. Cabot Professor of Public Policy and Professor of Economics, Harvard University, USA; Elizabeth Rossiello, Chief Executive Officer, Founder, BitPesa, Senegal; Zhu Ning, Professor, PBC School of Finance; Associate Dean, National Institute of Financial Research, Tsinghua University, People's Republic of China; Gillian R. Tett, Managing Editor, US, Financial Times, USA</td>
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<tr>
<td>09.00 - 09.30</td>
<td>Hub Session</td>
<td>The Big Picture on Our Oceans</td>
<td>Heather Koldewey, Fellow, National Geographic Society, USA; Douglas McCauley, Professor, University of California, Santa Barbara, USA; Gabriel O’Donnell, Principal Research Programmer, CMU CREATE Lab, Carnegie Mellon University, USA</td>
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<tr>
<td>09.00 - 10.15</td>
<td>Experience</td>
<td>A Day in the Life of a Refugee</td>
<td>Katharina Borchert, Chief Open Innovation Officer, Mozilla, USA; Young Global Leader; Greg Clark, Secretary of State for Business, Energy and Industrial Strategy of the United Kingdom; Marietje Schaake, Member of the European Parliament, European Union; Young Global Leader</td>
</tr>
</tbody>
</table>
Nara Lokesh, Minister of Information Technology, Electronics and Communications, Panchayat Raj, and Rural Development of Andhra Pradesh, India
Diana Paredes, Chief Executive Officer, Suade, United Kingdom
Xue Lan, Professor; Dean, Schwarzman College, Tsinghua University, People's Republic of China
Lisa Witter, Co-Founder and Executive Chairman, Apolitical, Germany; Young Global Leader

09.00 - 10.15 IdeasLab
Future-Proofing Food Systems with the University of Oxford
Charles Godfray, Director, Oxford Martin School, University of Oxford, United Kingdom
Susan Jebb, Professor of Diet and Population Health, Oxford Martin School, University of Oxford, United Kingdom
Sarah Whatmore, Professor of Environment and Public Policy; Head, Social Sciences Division, University of Oxford, United Kingdom
Louise Richardson, Vice-Chancellor, University of Oxford, United Kingdom
David Nabarro, Director, 4SD, Switzerland

Naomi Oreskes, Professor of the History of Science, Harvard University, USA

09.15 - 09.45 Hub Session
Drones: Localized Strategies for Global Technologies
Timothy Reuter, Project Head, Civil Drones, World Economic Forum
Michael de Lagarde, Chief Executive Officer, Delair, France

09.15 - 09.45 Hub Session
The Science of Adolescence
Ronald Dahl, Director, Institute of Human Development, University of California, Berkeley, USA

09.15 - 10.15 Televised Session
Emerging Markets Outlook
Berat Albayrak, Minister of Treasury and Finance of Turkey
Carrie Lam, Chief Executive of Hong Kong SAR, China
Kamal Nath, Chief Minister of Madhya Pradesh, India
Guido Sandleris, Governor of the Central Bank of Argentina
Kevin Sneader, Global Managing Partner, McKinsey & Company, Hong Kong SAR, China
Tarek Sultan Al Essa, Chief Executive Officer and Vice-Chairman of the Board, Agility, Kuwait
Vishnu Som, Principal Anchor, New Delhi Television (NDTV), India

09.15 - 10.15 Interactive Panel
Future Frontiers of Cybersecurity
Nikesh Arora, Chief Executive Officer and Chairman, Palo Alto Networks, USA
Oliver Bäte, Chief Executive Officer, Allianz, Germany
Myriam Dunn Cavelty, Deputy Head, Research and Teaching, Center for Security Studies, ETH Zürich, Switzerland
S Iswaran, Minister for Communications and Information; Minister-in-Charge of Trade Relations of Singapore
Jürgen Stock, Secretary-General, International Criminal Police Organization (INTERPOL), Lyon
Troels Oerting Jorgensen, Head of the Centre for Cybersecurity, World Economic Forum

09.15 - 10.15 Interactive Panel
Closing the Financing Gap
Afsaneh Mashayekhi Beschloss, Founder and Chief Executive Officer, RockCreek, USA
Bono, Co-Founder, (RED); Co-Founder, ONE, USA; Cultural Leader
Paul Kagame, President of Rwanda
Christine Lagarde, Managing Director, International Monetary Fund (IMF), Washington DC
Bill McGlashan, Co-Founder and Chief Executive Officer, The Rise Fund; Founder and Managing Partner, TPG Growth, TPG, USA
Rajiv Shah, President, Rockefeller Foundation, USA

09.15 - 10.15 Interactive Panel
Keeping Russia Competitive
Kirill Dmitriev, Chief Executive Officer, Russian Direct Investment Fund, Russian Federation; Young Global Leader
Rustam Minnikhanov, President of the Republic of Tatarstan, Russian Federation
Maxim Oreshkin, Minister of Economic Development of the Russian Federation; Young Global Leader
Boris Titov, Presidential Commissioner for Entrepreneurs’ Rights of the Russian Federation
Alessandra Galloni, Global News Editor, Reuters, Canada; Young Global Leader

09.30 - 10.00 Issue Briefing
Evolution of Terrorism: How Society and Institutions Are Adapting

John R. Allen, President, Brookings Institution, USA
Karin von Hippel, Director-General, Royal United Services Institute for Defence and Security Studies, United Kingdom
Philip Shetler-Jones, Programme Lead, Geopolitics and International Security, World Economic Forum

10.00 - 10.30 Exhibit
Behind the Idea: The Friendship Bench
Dixon Chibanda, Director, African Mental Health Research Initiative (AMARI), Zimbabwe

10.00 - 10.30 Hub Session
Ask About: Electroceuticals
Ada Poon, Associate Professor of Electrical Engineering, Stanford University, USA

10.00 - 10.45 Interactive Panel
Making Education Inclusive
David Edwards, General Secretary, Education International, Belgium
Ystnebresh Nugusse, Senior Inclusion Adviser, Light For The World, Austria; Cultural Leader
Susannah Rodgers, Paralympian and Director, Spirit of 2012, United Kingdom; Young Global Leader, Cultural Leader
Andria Zafirakou, Teacher, Arts and Textile, Alperton Community School, United Kingdom; Cultural Leader
Henrietta H. Fore, Executive Director, United Nations Children’s Fund (UNICEF), New York

10.15 - 11.00 Issue Briefing
Ending the Corruption Crisis
Matthew Caruana Galizia, Director, Daphne Caruana Galizia Foundation, Malta
Delia Ferreira Rubio, Chair, Transparency International, Argentina

Margery Kraus, Founder and Executive Chairman, APCO Worldwide, USA
Mokgweetsi Eric Keabetswe Masisi, President of Botswana
Oliver Cann, Head of Strategic Communications; Member of the Executive Committee, World Economic Forum

10.45 - 11.15 Hub Session
World in Transformation: Financial and Monetary Systems
Axel P. Lehmann, President, Personal and Corporate Banking; President, Switzerland, UBS, Switzerland

10.45 - 11.15 Hub Session
Ask About: Innovations in Mental Health Treatment
Carolyn Rodriguez, Assistant Professor, Stanford University, USA

10.45 - 11.45 Televised Session
More than GDP
Jacinda Ardern, Prime Minister of New Zealand; Young Global Leader
Erik Brynjolfsson, Director, MIT Initiative on the Digital Economy, MIT - Sloan School of Management; USA
Angel Gurria, Secretary-General, Organisation for Economic Co-operation and Development (OECD), Paris
Marianna Mazzucato, Professor of Economics of Innovation and Public Value; Founder and Director, Institute for Innovation and Public Purpose, University College London (UCL), United Kingdom
Ohoud Bint Khalifa Al Roumi, Minister of State for Happiness and Well-Being of the United Arab Emirates; Young Global Leader
Patrizia Laeri, Anchor, Swiss Television SRF, Switzerland
10.45 - 11.00 Interactive Panel
Women in the New World of Work
Allen Blue, Co-Founder and Vice-President, Products, LinkedIn Corporation, USA
Janet Foutty, Chair and Chief Executive Officer, Deloitte Consulting, Deloitte, USA
Jonas Prising, Chairman and Chief Executive Officer, ManpowerGroup, USA
Michelle Zacly, Co-Founder and Chief Operating Officer, Cloudflare, USA; Young Global Leader
Katja Iversen, President and Chief Executive Officer, Women Deliver, USA

10.45 - 11.45 Interactive Panel
When Global Orders Fail
Fang Xinghai, Vice-Chairman, China Securities Regulatory Commission, People's Republic of China
Minouche Shafik, Director, London School of Economics and Political Science, United Kingdom
Adam Tooze, Shelby Cullom Davis Chair of History, Columbia University, USA
Martin Wolf, Associate Editor and Chief Economics Commentator, Financial Times, United Kingdom

10.45 - 11.00 One-on-One
The New Science of Psychedelics
Allyson Shontell Lombardi, Editor-in-Chief, Business Insider US, Business Insider, USA
Robin Carhart-Harris, Head, Centre for Psychedelic Research, University of Oxford, United Kingdom

10.45 - 11.45 Workshop
The Creativity Lab
Andria Zafirakou, Teacher, Arts and Textile, Alperton Community School, United Kingdom; Cultural Leader

11.00 - 11.30 One-on-One
The New Science of Psychedelics

11.00 - 12.00 Interactive Panel
A New Deal for Nature
Carlos Alvarado Quesada, President of Costa Rica
Svein Tore Holeseter, President and Chief Executive Officer, Yara International, Norway
Cristiana Pasca Palmer, Executive Secretary, Convention on Biological Diversity, Montreal
Feike Sybesma, Chief Executive Officer and Chairman of the Managing Board, Royal DSM, Netherlands
Peter Thomson, United Nations Secretary-General’s Special Envoy for the Ocean, New York
Xie Zhenhua, Special Representative for Climate Change Affairs of the People’s Republic of China
Thomas L. Friedman, Columnist, Foreign Affairs, New York Times, USA

11.00 - 12.00 Interactive Panel
India 4.0: Making Technology Work for All
Sanjiv Bajaj, Managing Director, Bajaj Finserv, India
Amitabh Kant, Chief Executive Officer, NITI Aayog, India
Nara Lokesh, Minister of Information Technology, Electronics and Communications, Panchayat Raj, and Rural Development of Andhra Pradesh, India
Siddhartha Mukherjee, Assistant Professor of Medicine, Columbia University, USA
Stefan Oschmann, Chairman of the Executive Board and Chief Executive Officer, Merck, Germany
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11.00 - 12.00 Interactive Panel
Eurasia in a New Global Context
Mamuka Bakhtadze, Prime Minister of Georgia
Sumantra Chakrabarti, President, European Bank for Reconstruction and Development (EBRD), London
Shiv Vikram Khetma, Vice-Chairman, SUN Group, India
Karin Kneissl, Federal Minister for Europe, Integration and Foreign Affairs of Austria
Vali R. Nasr, Dean and Professor of International Relations, Paul H. Nitze School of Advanced International Studies (SAIS), Johns Hopkins University, USA
Ghida Fakhry, Presenter, TRT World, Turkey

11.15 - 12.00 Plenary Session
Special Address by Shinzō Abe, Prime Minister of Japan
Shinzō Abe, Prime Minister of Japan
Klaus Schwab, Founder and Executive Chairman, World Economic Forum

11.30 - 12.00 Hub Session
The Big Picture on Women in the Workforce
Gabriel O’Donnell, Principal Research Programmer, CMU CREATE Lab, Carnegie Mellon University, USA
Douglas L. Peterson, President and Chief Executive Officer, S&P Global, USA
Laura D’Andrea Tyson, Distinguished Professor of the Graduate School, Haas School of Business, University of California, Berkeley, USA

12.00 - 12.30 Interactive Panel
Digitalizing Emerging Markets
Paul Kagame, President of Rwanda
Jack Ma, Executive Chairman, Alibaba Group, People’s Republic of China
Zanny Minton Beddoes, Editor-in-Chief, The Economist, United Kingdom

12.00 - 12.30 Betazone
The Psychology of the Con: How Not to Get Fooled
Maria Konnikova, Author, USA
Gregory Warner, Host, NPR, USA

12.00 - 12.30 Hub Session
World in Transformation: The Digital Economy
James Chin Moody, Chief Executive Officer, Sendle, Australia; Young Global Leader
Manju George, Head of Platform Services, Digital Economy and Society, World Economic Forum

12.00 - 12.30 Hub Session
Ask About: The Mathematics of Natural Intelligence
Joshua Tenenbaum, Professor, Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology (MIT), USA

12.00 - 12.45 Interactive Panel
The New Energy Equation
Mohammad Sanusi Barkindo, Secretary-General, Organization of the Petroleum Exporting Countries (OPEC), Vienna

12.30 - 12.45 Experience
A Day in the Life of a Refugee

12.00 - 13.00 Interactive Panel
How Power Adapts in a Changing World
Hervé Lemahieu, Director, Asian Power and Diplomacy Programme, Lowy Institute, Australia
Ursula von der Leyen, Federal Minister of Defence of Germany
Michael J. Mazarr, Senior Political Scientist, RAND Corporation, USA
Karin von Hippel, Director-General, Royal United Services Institute for Defence and Security Studies, United Kingdom

12.30 - 13.00 Interactive Panel
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Karin von Hippel, Director-General, Royal United Services Institute for Defence and Security Studies, United Kingdom

12.00 - 14.00 Lunch Session
Embracing the Experience Economy
Erika Alessandri, Member of the Board, Technogym, Italy
Alain Bejjani, Chief Executive Officer, Majid Al Futtaim Holding, United Arab Emirates
Jose Silva, Chief Executive Officer, Jumeirah Group, United Arab Emirates
Jens Martin Skibsted, Partner, Skibsted Ideation, Denmark; Young Global Leader
Sandra Lopez, Advisory Board Executive, Women in Sports Technology, USA
12.30 - 14.00 Lunch Session
Global Value Chains: Race to the Top

Simon Bakker, Chief Executive Officer, Kennemer Foods International (KFI), Philippines
Abid Butt, Chief Executive Officer, e2e Supply Chain Management, Pakistan; Young Global Leader
Jayadev Galla, Vice-Chairman, Amara Raja Group, India
Celine Herweijer, Partner, PwC, United Kingdom; Young Global Leader
Mark Wu, Stimson Professor of Law, Harvard Law School, USA
Gita Gopinath, Chief Economist, International Monetary Fund (IMF), Washington DC; Young Global Leader

Vanessa Candeias, Head, Shaping the Future of Health and Healthcare; Member of the Executive Committee, World Economic Forum

12.30 - 14.00 Lunch Session
America’s Place in the Global Architecture

William Burns, President, Carnegie Endowment for International Peace, USA
David R. Gergen, Founding Director, Center for Public Leadership, Harvard Kennedy School of Government, USA
Vali R. Nasr, Dean and Professor of International Relations, Paul H. Nitze School of Advanced International Studies (SAIS), Johns Hopkins University, USA
Paul Smyke, Head of Regional Strategies, North America; Member of the Executive Committee, World Economic Forum

12.30 - 14.00 Lunch Session
Harnessing Europe’s Innovation Potential

Nadia Calviño Santamaría, Minister of Economy and Business of Spain
Alexander De Croo, Deputy Prime Minister and Minister of Finance and International Development; Young Global Leader
Pedro Siza Vieira, Deputy Prime Minister and Minister of Economy of Portugal
Ana Trbovich, Chief Operating Officer, Grid Singularity, Germany
Eckart Windhagen, Senior Partner, McKinsey Global Institute, United Kingdom
Carlos Moedas, Commissioner for Research, Science and Innovation, European Commission, Brussels
Florian Eder, Managing Editor, Europe, Politico, Belgium
Martina Larkin, Head of Regional Agenda, Europe and Eurasia; Member of the Executive Committee, World Economic Forum

12.30 - 14.00 Lunch Session
Igniting Innovation through Healthcare Data

Bruce Broussard, President and Chief Executive Officer, Humana, USA
Gianrico Farrugia, President and Chief Executive Officer, Mayo Clinic, USA
Marc Harrison, President and Chief Executive Officer, Intermountain Healthcare, USA
Lars Frueergaard Jorgensen, President and Chief Executive Officer, Novo Nordisk, Denmark
Takehiko Nakao, President, Asian Development Bank, Manila
Michael E. Porter, University Professor, Harvard Business School, USA
Francesca Colombo, Head, Health Division, Organisation for Economic Co-operation and Development (OECD), Paris

12.30 - 14.00 Lunch Session
Learning from China’s Tech Miracle

Calvin Choi, Chairman and President, AMTD Group, Hong Kong SAR, China; Young Global Leader
Anna Fang, Partner and Chief Executive Officer, ZhenFund, People’s Republic of China; Young Global Leader
Bill Liu Zihong, Founder, Chairman and Chief Executive Officer, Royole Corporation, People’s Republic of China; Young Global Leader
Winslow Porter, Director, Producer and Creative Technologist, Virtual Reality Films, New Reality Co., USA; Cultural Leader
Katherine Xin, Professor of Management; Associate Dean, China Europe International Business School, People’s Republic of China
Zhu Ning, Professor, PBC School of Finance; Associate Dean, National Institute of Financial Research, Tsinghua University, People’s Republic of China
Katharina Borchert, Chief Open Innovation Officer, Mozilla, USA; Young Global Leader

12.30 - 14.00 Lunch Session
Russia and the World

Frederick Kempe, President and Chief Executive Officer, Atlantic Council, USA
Karim Kneissl, Federal Minister for Europe, Integration and Foreign Affairs of Austria
Amre Moussa, Secretary-General of the League of Arab States (2001-2011); Head of the Constitution of Fifty, Egypt
Maxim Oreshkin, Minister of Economic Development of the Russian Federation; Young Global Leader
Gideon Rose, Editor, Foreign Affairs, USA
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12.45 - 13.15 Hub Session
Ask About: RNA Vaccines
Robin Shattock, Chair, Mucosal Infection and Immunity, Imperial College London, United Kingdom

13.00 - 14.00 Interactive Panel
Shaping the Future of Democracy
Daniella Ballou-Aares, Chief Executive Officer, Leadership Now Project, USA; Young Global Leader
Ivan Duque, President of Colombia
Nikol Pashinyan, Prime Minister of the Republic of Armenia
K P Sharma Oli, Prime Minister of Nepal
Arthur Gregg Sulzberger, Publisher, New York Times, USA
Martin Wolf, Associate Editor and Chief Economics Commentator, Financial Times, United Kingdom

13.00 - 14.00 Open Forum
An Insight, An Idea with Jane Goodall
Jane Goodall, Founder, Jane Goodall Institute, USA
Fareed Zakaria, Host, Fareed Zakaria GPS, CNN, USA

13.30 - 14.00 Issue Briefing
The Debt Time Bomb
Eric Cantor, Vice-Chairman and Managing Director, Moelis & Company, USA
Jin Keyu, Professor of Economics, London School of Economics and Political Science, United Kingdom; Young Global Leader
Mthuli Ncube, Minister of Finance and Economic Development of Zimbabwe
Maurizio Molinari, Editor-in-Chief, Stampa, Italy

13.30 - 14.00 One-on-One
A Conversation with Abiy Ahmed, Prime Minister of Ethiopia
Abiy Ahmed, Prime Minister of Ethiopia
Borge Brende, President; Member of the Managing Board, World Economic Forum

13.30 - 14.00 Hub Session
Enhancing Cyber Resilience from the Top
Alison Martin, Group Chief Risk Officer, Zurich Insurance Group, Switzerland
Matthew Prince, Co-Founder and Chief Executive Officer, CloudFlare, USA

14.00 - 15.00 Screening
Director’s Cut: Freedom Fighters
Sharmin Obaid Chinoy, Chief Executive Officer, SOC Films, Pakistan; Young Global Leader, Cultural Leader
Kumi Naidoo, Secretary-General, Amnesty International, United Kingdom; Young Global Leader

14.15 - 15.00 Plenary Session
Special Address by Angela Merkel, Federal Chancellor of Germany
Angela Merkel, Federal Chancellor of Germany
Klaus Schwab, Founder and Executive Chairman, World Economic Forum

14.00 - 15.00 Plenary Session
Meaningful Life: Harnessing Stress
Eve Ekman, Director, Training, Greater Good Science Center, University of California, Berkeley, USA
Elissa Epel, Professor, University of California, San Francisco (UCSF), USA

14.15 - 14.45 Hub Session
Ask About: Diet Interventions
Susan Jebb, Professor of Diet and Population Health, Oxford Martin School, University of Oxford, United Kingdom

14.45 - 15.15 Plenary Session
Ask About: Morality, Decisions and Happiness
Molly Crockett, Assistant Professor of Psychology, Yale University, USA; Young Global Leader

14.45 - 15.15 Plenary Session
Ending Modern Slavery
Henrietta H. Fore, Executive Director, United Nations Children’s Fund (UNICEF), New York
Gary A. Haugen, Chief Executive Officer, International Justice Mission (IJM), USA
Antonio Neri, President and Chief Executive Officer, Hewlett Packard Enterprise, USA
Arne Sorenson, President and Chief Executive Officer, Marriott International, USA
Richard Quest, Anchor, Quest Means Business, CNN International, USA

15.15 - 15.45 Plenary Session
Special Address by Angela Merkel, Federal Chancellor of Germany
Angela Merkel, Federal Chancellor of Germany
Klaus Schwab, Founder and Executive Chairman, World Economic Forum
14.30 - 15.00 Hub Session
Voice for the Planet

Yi Hsin Cathy Chen, Senior Policy Adviser, Natural Resources Canada
Marco Lambertini, Director-General, WWF International, Switzerland

14.30 - 15.15 Interactive Panel
The Demographics of the Gig Workforce

Olajumoke Adekeye, Founder, The Young Business Agency, Nigeria
Vijay Eswaran, Executive Chairman, Q1 Group, Malaysia
Christy Hoffman, General Secretary, UNI Global Union, Switzerland
Brad Stone, Senior Executive Editor, Technology, Bloomberg News, USA

14.30 - 15.30 Interactive Panel
Ending Violence in the Sahel

Kamissa Camara, Minister of Foreign Affairs of Mali
Peter Maurer, President, International Committee of the Red Cross (ICRC), Geneva
Robert Muggah, Director, Igarapé Institute, Brazil
Gabriel O’Donnell, Principal Research Programmer, CMU CREATE Lab, Carnegie Mellon University, USA
Simon Robinson, Regional Editor, Europe, Middle East and Africa, Reuters, Canada

14.30 - 15.30 Interactive Panel
Realizing the Energy Transition

Christiana Figueres, Founding Partner, Global Optimism, United Kingdom
Vicki Hollub, President and Chief Executive Officer, Occidental Petroleum Corporation, USA
Jeff Radebe, Minister of Energy of South Africa
Francesco Starace, Chief Executive Officer and General Manager, Enel, Italy
Maria Fernanda Suarez, Minister of Mines and Energy of Colombia
Jules Kortenhorst, Chief Executive Officer, Rocky Mountain Institute, USA

14.30 - 15.30 Interactive Panel
The Geopolitical Outlook

Chrystia Freeland, Minister of Foreign Affairs of Canada
David R. Gergen, Founding Director, Center for Public Leadership, Harvard Kennedy School of Government, USA
Heng Swee Keat, Minister for Finance of Singapore
Kang Kyung-Wha, Minister of Foreign Affairs of the Republic of Korea

Taro Kono, Minister of Foreign Affairs of Japan
Børge Brende, President; Member of the Managing Board, World Economic Forum

14.30 - 15.45 xChange
Building a Clean Mobility Future

Tex Gunning, Chief Executive Officer, LeasePlan, Netherlands
Katie Hill, Global Director, Power Management and Strategic Initiatives, Liquid Telecom, Kenya; Young Global Leader
Martin Lundstedt, President and Chief Executive Officer, Volvo, Sweden
Antonio Mexia, Chief Executive Officer, EDP - Energias de Portugal, Portugal
Eric Jillard, Head of Automotive Industry, World Economic Forum
Manpreet Badal, Minister of Finance and Planning of Punjab, India
Naomi Oreskes, Professor of the History of Science, Harvard University, USA
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14.45 - 16.00 Interactive Panel
Building Digital Networks of Tomorrow

John Donovan, Chief Executive Officer, AT&T Communications, AT&T, USA

Börje Ekholm, President and Chief Executive Officer, Ericsson, Sweden

S Iswaran, Minister for Communications and Information; Minister-in-Charge of Trade Relations of Singapore

Atul Mehta, Senior Director; Global Head, Telecom Media Technology, Venture Capital and Private Equity Funds, International Finance Corporation, Washington DC

Linda Yaccarino, Chairman, Advertising and Partnerships, NBCUniversal, USA

Laxmi Akkaraju, Chief Strategy Officer, GSMA, United Kingdom

Derek O’Halloran, Head of Digital Economy and Society System Initiative; Member of the Executive Committee, World Economic Forum

15.15 - 15.45 Hub Session
Precision Medicine: Localized Strategies for Global Technologies

Genya Dana, Project Head, Precision Medicine, World Economic Forum

Gianrico Farrugia, President and Chief Executive Officer, Mayo Clinic, USA

Elizabeth ODay, Founder and Chief Executive Officer, Olaris Therapeutics, USA

15.15 - 15.45 Hub Session
Ask About: Social and Biological Drivers of Ageing

Virpi Lummaa, Academy Professor, University of Turku, Finland

15.30 - 16.00 One-on-One
An Insight, An Idea with Marin Alsop

Marin Alsop, Conductor, Intermusica Artists’ Management, United Kingdom; Cultural Leader

Lord Anthony William Hall of Birkenhead, Director-General, BBC, United Kingdom

15.30 - 16.15 Interactive Panel
Curbing the Opioid Crisis

Manpreet Badal, Minister of Finance and Planning of Punjab, India

Ilona Szabó de Carvalho, Executive Director, Igarapé Institute, Brazil; Young Global Leader

16.00 - 16.30 Hub Session
Blockchain: Localized Strategies for Global Technologies

David Burt, Premier of Bermuda

Elizabeth Rossiello, Chief Executive Officer, Founder, BitPesa, Senegal

Sheila Warren, Project Head, Blockchain and Distributed Ledger Technology, World Economic Forum

16.00 - 17.00 Interactive Panel
Strategic Economic Outlook on Europe

Peter Altmaier, Federal Minister of Economic Affairs and Energy of Germany

Pierre Moscovici, Commissioner for Economic and Financial Affairs, Taxation and Customs, European Commission, Brussels

Gillian Tans, President and Chief Executive Officer, Booking.com, Netherlands

Beatrice Weder di Mauro, President, Centre for Economic Policy Research (CEPR), United Kingdom; Young Global Leader

Thorold Barker, Editor, Europe, Middle East and Africa, Wall Street Journal, United Kingdom

15.00 - 15.45 Plenary Session
Special Address by Wang Qishan, Vice-President of the People’s Republic of China

Wang Qishan, Vice-President of the People’s Republic of China

Klaus Schwab, Founder and Executive Chairman, World Economic Forum

15.00 - 15.45 Open Forum
Storytellers: In Search of Belonging

Rena Effendi, Photographer, Turkey; Cultural Leader

Madeline Gannon, Founder and Principal Researcher, Atonaton, USA; Cultural Leader

15.30 - 16.00 One-on-One
An Insight, An Idea with Marin Alsop

15.30 - 16.15 Interactive Panel
Curbing the Opioid Crisis

Manpreet Badal, Minister of Finance and Planning of Punjab, India

Ilona Szabó de Carvalho, Executive Director, Igarapé Institute, Brazil; Young Global Leader

16.00 - 17.00 Interactive Panel
Mental Health Matters

Jacinda Ardern, Prime Minister of New Zealand; Young Global Leader

Dixon Chibanda, Director, African Mental Health Research Initiative (AMARI), Zimbabwe
John Flint, Chief Executive Officer, HSBC Holdings, United Kingdom
The Duke of Cambridge, Duke of Cambridge
Bernard J. Tyson, Chairman and Chief Executive Officer, Kaiser Permanente, USA
Becky Quick, Co-Anchor, Squawk Box, CNBC, USA

Gayle E. Smith, President and Chief Executive Officer, ONE, USA
C. Vijayakumar, President and Chief Executive Officer, HCL Technologies, USA
Heather Long, Economics Correspondent, Washington Post, USA

16.30 - 17.45 xChange
Securing Connected Systems

Steven J. Corwin, President and Chief Executive Officer, NewYork-Presbyterian, USA
Sharon Dijksma, Deputy Mayor of Amsterdam, Netherlands
George Oliver, Chairman and Chief Executive Officer, Johnson Controls, USA
Houlin Zhao, Secretary-General, International Telecommunication Union (ITU), Geneva
Laura Barrowman, Group Chief Technology Officer, Credit Suisse, Switzerland
Troels Oerting Jorgensen, Head of the Centre for Cybersecurity, World Economic Forum

Gina Badenoch, Founder, Capaxia, United Kingdom; Young Global Leader, Cultural Leader
Susanne Bruyere, Professor of Disability Studies, ILR School, Cornell University, USA
Caroline Casey, Founder, Binc, Ireland; Young Global Leader, Cultural Leader
Yetnebersh Nigussie, Senior Inclusion Adviser, Light For The World, Austria; Cultural Leader
Adam Grant, Saul P. Steinberg Professor of Management and Psychology, Wharton School, University of Pennsylvania, USA; Young Global Leader

16.00 - 17.00 Interactive Panel
Strategic Outlook for Japan

Tak Niinami, Chief Executive Officer, Suntory Holdings, Japan
Hiroshige Seko, Minister of Economy, Trade and Industry of Japan
Keiko Tashiro, Senior Executive Managing Director, Head of Overseas Operations, Daiwa Securities Group, Japan
Lord J. Adair Turner, Chairman, Energy Transitions Commission, United Kingdom
Gideon Rachman, Associate Editor and Chief Foreign Affairs Commentator, Financial Times, United Kingdom

Gina Badenoch, Founder, Capaxia, United Kingdom; Young Global Leader, Cultural Leader
Susanne Bruyere, Professor of Disability Studies, ILR School, Cornell University, USA
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Yetnebersh Nigussie, Senior Inclusion Adviser, Light For The World, Austria; Cultural Leader
Adam Grant, Saul P. Steinberg Professor of Management and Psychology, Wharton School, University of Pennsylvania, USA; Young Global Leader

16.00 - 17.00 Interactive Panel
Disability Inclusion: Making it Work

Wang Chen, President, Chinese Academy of Medical Sciences, People’s Republic of China
Jeffrey M. Drazen, Editor-in-Chief, New England Journal of Medicine, USA

16.00 - 17.00 Televised Session
Making Digital Globalization Inclusive

Keith Block, Co-Chief Executive Officer, Salesforce, USA
Erik Brynjolfsson, Director, MIT Initiative on the Digital Economy, MIT - Sloan School of Management, USA
Michael S. Dell, Chairman and Chief Executive Officer, Dell Technologies, USA
Michael Froman, Vice-Chairman and President, Strategic Growth, Mastercard, USA

16.30 - 17.15 Interactive Panel
The Family Business Case

Camilla Hagen Solri, Member of the Board, Canica, Norway; Young Global Leader
Badr Jafar, Chief Executive Officer, Crescent Enterprises, United Arab Emirates; Young Global Leader
Lubna S. Olayan, Chief Executive Officer and Deputy Chairperson, Olayan Financing Company, Saudi Arabia
André Hoffmann, Chairman, Massellaz, Switzerland

16.30 - 17.45 Experience
A Day in the Life of a Refugee

John Flint, Chief Executive Officer, HSBC Holdings, United Kingdom
Bernard J. Tyson, Chairman and Chief Executive Officer, Kaiser Permanente, USA
Becky Quick, Co-Anchor, Squawk Box, CNBC, USA
Gayle E. Smith, President and Chief Executive Officer, ONE, USA
C. Vijayakumar, President and Chief Executive Officer, HCL Technologies, USA
Heather Long, Economics Correspondent, Washington Post, USA

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C. Vijayakumar, President and Chief Executive Officer, HCL Technologies, USA
Heather Long, Economics Correspondent, Washington Post, USA

16.30 - 17.45 Workshop
Disability Inclusion: Making it Work

Gina Badenoch, Founder, Capaxia, United Kingdom; Young Global Leader, Cultural Leader
Susanne Bruyere, Professor of Disability Studies, ILR School, Cornell University, USA
Caroline Casey, Founder, Binc, Ireland; Young Global Leader, Cultural Leader
Yetnebersh Nigussie, Senior Inclusion Adviser, Light For The World, Austria; Cultural Leader
Adam Grant, Saul P. Steinberg Professor of Management and Psychology, Wharton School, University of Pennsylvania, USA; Young Global Leader

16.30 - 17.45 IdeasLab
AI and Computing: Developing the Next Mathematics with Massachusetts Institute of Technology

Cynthia Breazeal, Associate Professor, Media Arts and Sciences, Massachusetts Institute of Technology (MIT), USA
### Global Dialogues

#### Wednesday

**23 January**

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<th>Event</th>
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<td>16.45 - 17.15</td>
<td>Hub Session&lt;br&gt;&lt;br&gt;<strong>Robotics and Internet of Things: Localized Strategies for Global Technologies</strong>&lt;br&gt;&lt;br&gt;Jeff Merritt, Head of IoT, Robotics &amp; Smart Cities, World Economic Forum&lt;br&gt;Erica Alessandri, Member of the Board, Technogym, Italy&lt;br&gt;Melonee Wise, Chief Executive Officer, Fetch Robotics, USA</td>
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<td>17.00 - 17.45</td>
<td>Betazone&lt;br&gt;&lt;br&gt;<strong>Compassion through Computation: Fighting Algorithmic Bias</strong>&lt;br&gt;&lt;br&gt;Joy Buolamwini, Researcher; Founder, Algorithmic Justice League, Massachusetts Institute of Technology (MIT) Media Laboratory, USA&lt;br&gt;Justine Cassell, Associate Dean, Technology, Strategy and Impact, School of Computer Science, Carnegie Mellon University, USA&lt;br&gt;Gideon Lichfield, Editor-in-Chief, MIT - Technology Review, USA</td>
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<td>17.30 - 18.00</td>
<td>Plenary Session&lt;br&gt;&lt;br&gt;<strong>Special Address by Giuseppe Conte, Prime Minister of Italy</strong>&lt;br&gt;&lt;br&gt;Giuseppe Conte, Prime Minister of Italy&lt;br&gt;Borge Brende, President; Member of the Managing Board, World Economic Forum</td>
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<td>17.30 - 18.15</td>
<td>Interactive Panel&lt;br&gt;&lt;br&gt;<strong>Behind the Artists’ Idea: Tree</strong>&lt;br&gt;&lt;br&gt;Winslow Porter, Director, Producer and Creative Technologist, Virtual Reality Films, New Reality Co., USA; Cultural Leader&lt;br&gt;Milica Zec, Director, Film and Mixed Reality, New Reality Co., USA; Cultural Leader&lt;br&gt;Carol Becker, Dean of Faculty, School of the Arts, Columbia University, USA; Cultural Leader</td>
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<tr>
<td>17.30 - 18.30</td>
<td>Televised Session&lt;br&gt;&lt;br&gt;<strong>China Economic Outlook</strong>&lt;br&gt;&lt;br&gt;Timothy Adams, President and Chief Executive Officer, Institute of International Finance (IIF), USA&lt;br&gt;Fang Xinghai, Vice-Chairman, China Securities Regulatory Commission, People’s Republic of China&lt;br&gt;Jin Keyu, Professor of Economics, London School of Economics and Political Science, United Kingdom; Young Global Leader&lt;br&gt;Glenn Youngkin, Co-Chief Executive Officer, Carlyle Group, USA&lt;br&gt;John Zhao, Chairman and Chief Executive Officer, Hony Capital, People’s Republic of China&lt;br&gt;Yang Yangjing, Deputy Editor-in-Chief, Yicai Media Group, People’s Republic of China</td>
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<td>17.30 - 18.00</td>
<td>Issue Briefing&lt;br&gt;&lt;br&gt;<strong>Finding Future Jobs</strong>&lt;br&gt;&lt;br&gt;Olajumoke Adekeye, Founder, The Young Business Agency, Nigeria&lt;br&gt;Christine Lagarde, Managing Director, International Monetary Fund (IMF), Washington DC</td>
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<td>17.30 - 18.30</td>
<td>Televised Session&lt;br&gt;&lt;br&gt;<strong>Taking Action for the Ocean</strong>&lt;br&gt;&lt;br&gt;Michelle Bachelet, United Nations High Commissioner for Human Rights, Geneva&lt;br&gt;Marc Benioff, Chairman and Co-Chief Executive Officer, Salesforce, USA&lt;br&gt;Al Gore, Vice-President of the United States (1993-2001); Chairman and Co-Founder, Generation Investment Management, USA&lt;br&gt;Nina Jensen, Chief Executive Officer, REV Ocean, Norway; Young Global Leader&lt;br&gt;Enric Sala, Explorer-in-Residence, National Geographic Society, USA; Young Global Leader&lt;br&gt;Francine Lacqua, Editor-at-Large and Presenter, Bloomberg Television, United Kingdom</td>
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<td>17.30 - 18.30</td>
<td>Interactive Panel&lt;br&gt;&lt;br&gt;<strong>Speaking out under Threat</strong>&lt;br&gt;&lt;br&gt;Sir Tim Berners-Lee, Professor of Engineering, MIT Computer Science and Artificial Intelligence Laboratory (CSAIL), USA&lt;br&gt;Matthew Caruana Galizia, Director, Daphne Caruana Galizia Foundation, Malta&lt;br&gt;Patrick Chappatte, Editorial Cartoonist &amp; Founder, Globe Cartoon, Switzerland; Young Global Leader&lt;br&gt;Sharmeen Obaid Chinoy, Chief Executive Officer, SOC Films, Pakistan; Young Global Leader&lt;br&gt;Patrick Chappatte, Editorial Cartoonist &amp; Founder, Globe Cartoon, Switzerland; Young Global Leader&lt;br&gt;Enric Sala, Explorer-in-Residence, National Geographic Society, USA; Young Global Leader&lt;br&gt;Francine Lacqua, Editor-at-Large and Presenter, Bloomberg Television, United Kingdom</td>
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<td>Televised Session&lt;br&gt;&lt;br&gt;<strong>Tackling the Growth Paradox</strong>&lt;br&gt;&lt;br&gt;Laurence D. Fink, Chairman and Chief Executive Officer, BlackRock, USA&lt;br&gt;Chrystia Freeland, Minister of Foreign Affairs of Canada&lt;br&gt;Rich Lesser, Global Chief Executive Officer, Boston Consulting Group, USA</td>
</tr>
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</table>
20.00 - 22.00 Dinner Session
Europe Stepping Up to Lead?

Alexander De Croo, Deputy Prime Minister and Minister of Finance and International Development; Young Global Leader
Ivan Krastev, Chairman, Centre for Liberal Strategies, Bulgaria
Michal Krupinski, Chief Executive Officer, Bank Pekao, Poland; Young Global Leader
Bruno Le Maire, Minister of Economy and Finance of France
Emma Marcegaglia, Chairman, Eni, Italy
Adam Tooze, Shelby Cullom Davis Chair of History, Columbia University, USA
Angela Merkel, Federal Chancellor of Germany
Isabelle Kumar, Journalist and Presenter, Euronews, France
Martina Larkin, Head of Regional Agenda, Europe and Eurasia; Member of the Executive Committee, World Economic Forum

19.15 - 22.50 Dinner Session
Sensory Dinner in the Dark

Gina Badenoch, Founder, Capaxia, United Kingdom; Young Global Leader, Cultural Leader

20.00 - 22.00 Dinner Session
Joyful by Design

Caroline Baumann, Director, Cooper Hewitt, Smithsonian Design Museum, USA; Cultural Leader
Mehdi Ghadyanloo, Artist, Painter and Public Artist, Islamic Republic of Iran; Cultural Leader
John Goodwin, Chief Executive Officer, LEGO Foundation, Denmark
Alex Liu, Managing Partner and Chairman, A.T. Kearney, USA
Laurie Santos, Professor of Psychology; Head, Silliman College, Yale University, USA
Adam Grant, Saul P. Steinberg Professor of Management and Psychology, Wharton School, University of Pennsylvania, USA; Young Global Leader

20.00 - 22.00 Dinner Session
A Human-Centred Future for Latin America

Carlos Alvarado Quesada, President of Costa Rica
Jair Bolsonaro, President of Brazil
Lenin Moreno Garcés, President of Ecuador
Satya Nadella, Chief Executive Officer, Microsoft Corporation, USA
Marisol Arqueta de Barillas, Head of Regional Strategies, Latin America; Member of the Executive Committee, World Economic Forum; Young Global Leader
Everyone, everywhere should have someone to turn to in support of their mental health #wef19 #TimeToAct
Voice for the Planet

People across the world are adding their voices to the call for urgent action on climate, oceans, and biodiversity.

Let’s make 2020 a turning point to set the planet on a path to recovery.

Akira Sakano in the session Voice for the Planet

Cartooning for Peace

Bono in the session Closing the Financing Gap
Thursday
24 January

08.15 - 08.45 Meditation
Morning Meditation
Tsoknyi Rinpoche, Founder, Pundarika Foundation, USA

08.30 - 12.20 Retreat
Meaningful Life: Harnessing Stress
Eve Ekman, Director, Training, Greater Good Science Center, University of California, Berkeley, USA
Elissa Epel, Professor, University of California, San Francisco (UCSF), USA

09.00 - 09.30 One-on-One
A Conversation with Nguyen Xuan Phuc, Prime Minister of Viet Nam
Nguyen Xuan Phuc, Prime Minister of Viet Nam
Børge Brende, President; Member of the Managing Board, World Economic Forum

09.00 - 09.30 One-on-One
Digital Trust and Transformation: A Conversation with Daniel Zhang
Daniel Zhang, Chief Executive Officer, Alibaba Group, People's Republic of China
Klaus Schwab, Founder and Executive Chairman, World Economic Forum

09.00 - 09.45 Interactive Panel
Parenting in a Rapidly Changing World
Ronald Dahl, Director, Institute of Human Development, University of California, Berkeley, USA

09.00 - 10.00 Interactive Panel
A New Architecture for Cyber-Cooperation
Catherine De Bolle, Executive Director, Europol (European Union Agency for Law Enforcement Cooperation), The Hague
Gottfried Leibbrandt, Chief Executive Officer, SWIFT, Belgium
Tzipi Livni, Head of the Hatnuah Party, Israel
Alison Martin, Group Chief Risk Officer, Zurich Insurance Group, Switzerland
Bradford L. Smith, President and Chief Legal Officer, Microsoft, USA
Samir Saran, President, Observer Research Foundation (ORF), India
Troels Oerting Jorgensen, Head of the Centre for Cybersecurity, World Economic Forum

09.00 - 10.00 xChange
Realizing the Internet of Things
Stefan Gross-Selbeck, Global Managing Partner, BCG Digital Ventures, Germany
Bhairavi Jani, Executive Director, SCA Group of Companies, India; Young Global Leader
Nara Lokesh, Minister of Information Technology, Electronics and Communications, Panchayat Raj, and Rural Development of Andhra Pradesh, India
Eric Rondolat, Chief Executive Officer, Signify, Netherlands
Jeff Merritt, Head of IoT, Robotics & Smart Cities, World Economic Forum
Adrian Lovett, President and Chief Executive Officer, World Wide Web Foundation, Switzerland
09.00 - 10.00 Interactive Panel
**Mapping Paths to Stability in Venezuela**

Moisés Naim, Distinguished Fellow, Carnegie Endowment for International Peace, USA
Gabriela Saade, Researcher and Project Coordinator, La Mejor Venezuela Foro, Venezuela
José Valencia, Minister of Foreign Affairs of Ecuador
Jonathan Tepperman, Editor-in-Chief, Foreign Policy Group, USA

Richard Sezibera, Minister of Foreign Affairs and International Cooperation of Rwanda
Lindwe Nonceba Sisulu, Minister of International Relations and Cooperation of South Africa
Seema Kumar, Vice-President, Innovation, Global Health and Policy Communication, Johnson & Johnson, USA
Mohammed Hassan Mohamud, Zonal Chairman, Kakuma, Kenya
Sipho M Pityana, Chairman, AngloGold Ashanti, South Africa
Bineta Diop, Founder and President, Femmes Africa Solidarité, Switzerland

Celine Herweijer, Partner, PwC, United Kingdom; Young Global Leader
Anne Toth, Head of Technology Policy and Partnerships; Member of the Executive Committee, World Economic Forum

09.15 - 09.45 Hub Session
**Ask About: Mapping Food Poverty**

Sarah Whatmore, Professor of Environment and Public Policy; Head, Social Sciences Division, University of Oxford, United Kingdom

09.00 - 10.15 Interactive Panel
**Global Trade at a Tipping Point**

David Abney, Chairman and Chief Executive Officer, UPS, USA
Roberto Azevêdo, Director-General, World Trade Organization (WTO), Geneva
Cai Mingpo, Founder and President, Cathay Capital Private Equity, France
Cecilia Malmström, Commissioner for Trade, European Commission, Brussels
Christian Sewing, Chief Executive Officer, Deutsche Bank, Germany
Paula J. Dobriansky, Senior Fellow, Future of Diplomacy Project, Belfer Center for Science and International Affairs, Harvard Kennedy School of Government, USA

09.15 - 10.15 Interactive Panel
**Peacebuilding in Africa**

Yoweri Kaguta Museveni, President of Uganda
Kamissa Camara, Minister of Foreign Affairs of Mali
Kumi Naidoo, Secretary-General, Amnesty International, United Kingdom; Young Global Leader

09.15 - 09.45 Hub Session
**A Sustainable Earth: Localized Strategies for Global Technologies**

Brent Bergeron, Executive Vice-President, Corporate Affairs and Sustainability, Goldcorp, Canada

James Gorman, Chairman and Chief Executive Officer, Morgan Stanley, USA
Mohammed Al-Jadaan, Minister of Finance of Saudi Arabia
Patrick Pouyanné, Chairman of the Board and Chief Executive Officer, Total, France
Global Dialogues

Thursday
24 January

Sarah Al Suhaimi, Chairperson of the Board of Directors, Saudi Stock Exchange (Tadawul), Saudi Arabia; Young Global Leader
Mohammad Al Tuwaijri, Minister of Economy and Planning of Saudi Arabia
Robin Niblett, Director, Chatham House, United Kingdom

09.15 - 10.15 Televised Session
Globalization 4.0: China’s Role in the Future of Global Commerce

Jeffery Lu Minfang, Chief Executive Officer, Mengniu Group, People’s Republic of China
Julia Luscombe, Director, Strategic Initiatives, Feeding America, USA
Penny Mordaunt, Secretary of State for International Development of the United Kingdom
Song Zhiping, Chairman of the Board, China National Building Material Group Corporation, People’s Republic of China
Bill Winters, Group Chief Executive Officer, Standard Chartered Bank, United Kingdom
Li Sixuan, Anchor, China Central Television (CCTV), People’s Republic of China; Young Global Leader

10.00 - 10.30 Hub Session
Artificial Intelligence: Localized Strategies for Global Technologies

Kay Firth-Butterfield, Project Head, Artificial Intelligence and Machine Learning, World Economic Forum
Omar bin Sultan Al Olama, Minister of State for Artificial Intelligence of the United Arab Emirates
Akshay Sabhikhi, Chief Executive Officer, CognitiveScale, USA

10.00 - 10.30 Hub Session
Ask About: Heat-Stable Vaccines

Jason Hallett, Professor of Sustainable Chemical Technology, Imperial College London, United Kingdom

10.00 - 10.45 Interactive Panel
Behind the Artist’s Idea: Finding Hope

Mehdi Ghadyanloo, Artist, Painter and Public Artist, Islamic Republic of Iran; Cultural Leader
Carol Becker, Dean of Faculty, School of the Arts, Columbia University, USA; Cultural Leader

10.15 - 10.45 Issue Briefing
Is This the End or Beginning of Globalism?

Laurence Boone, Chief Economist, Organisation for Economic Co-operation and Development (OECD), Paris
Gita Gopinath, Chief Economist, International Monetary Fund (IMF), Washington DC; Young Global Leader
Oliver Cann, Head of Strategic Communications; Member of the Executive Committee, World Economic Forum

10.15 - 10.45 Hub Session
The Big Picture on Women in the Workforce

Martina Cheung, President, S&P Global Market Intelligence, S&P Global, USA
Gabriel O’Donnell, Principal Research Programmer, CMU CREATE Lab, Carnegie Mellon University, USA
Laura D’Andrea Tyson, Distinguished Professor of the Graduate School, Haas School of Business, University of California, Berkeley, USA

10.45 - 11.15 Hub Session
Ask About: Empathic AI

Cynthia Breazeal, Associate Professor, Media Arts and Sciences, Massachusetts Institute of Technology (MIT), USA

10.45 - 11.15 Hub Session
Understanding Global Risk: The 2019 Report

Aengus Collins, Head of Global Risks and the Geopolitical Agenda, World Economic Forum

10.45 - 11.30 Plenary Session
The New Impetus for Europe

Ana Botín, Group Executive Chairman, Banco Santander, Spain
Cecilia Malmström, Commissioner for Trade, European Commission, Brussels
Mateusz Morawiecki, Prime Minister of Poland
Mark Rutte, Prime Minister of the Netherlands
Leo Varadkar, Taoiseach of Ireland; Young Global Leader
Klaus Schwab, Founder and Executive Chairman, World Economic Forum
10.45 - 11.45 Interactive Panel
**Mapping Data Dominance**

Olajumoke Adekeye, Founder, The Young Business Agency, Nigeria
Mats Granryd, Director-General, GSMA, United Kingdom
Ngaire Woods, Dean, Blavatnik School of Government, University of Oxford, United Kingdom
Ricardo Hausmann, Director, Center for International Development; Professor of Practice of Economic Development, Harvard University, USA

10.45 - 12.00 xChange
**Learning from Connected Cities**

Carlos Brito, Chief Executive Officer, Anheuser-Busch InBev, USA
Bernard Charlès, Vice-Chairman and Chief Executive Officer, Dassault Systèmes, France
Abha Joshi-Ghani, Senior Adviser, Infrastructure, Public-Private Partnerships and Guarantees, World Bank, Washington DC

Nadhmi Al Nasr, Chief Executive Officer, NEOM, Saudi Arabia
Christian Ulbrich, Global Chief Executive Officer; President, JLL, USA
Anil Menon, Senior Adviser to the Chairman, World Economic Forum
Jeff Merritt, Head of IoT, Robotics & Smart Cities, World Economic Forum
Carlo Ratti, Director, SENSEable City Laboratory, MIT - Department of Urban Studies and Planning, USA; Cultural Leader

Makoto Gonokami, President, University of Tokyo, Japan
Jamie Heller, Business Editor, Wall Street Journal, USA

10.45 - 11.45 Interactive Panel
**Middle East Security Outlook**

Mohamed Ali Alhakim, Minister of Foreign Affairs of Iraq
Rached Ghannouchi, Leader, Ennahda Party, Tunisia
Majid Jafar, Chief Executive Officer, Crescent Petroleum, United Arab Emirates; Young Global Leader
Ayman Al Safadi, Minister of Foreign Affairs and Expatriates of the Hashemite Kingdom of Jordan
Mina Al-Oraibi, Editor-in-Chief, The National, United Arab Emirates; Young Global Leader

10.45 - 12.00 Institutional Session
**Unlocking the Power of Environmental, Social and Governance Data**

Stephanie von Friedeburg, Chief Operating Officer, International Finance Corporation, Washington DC
Brian Gilvary, Group Chief Financial Officer, BP, United Kingdom
Barbara Novick, Vice-Chairman, BlackRock, USA
John J. Studzinski, Vice-Chairman, Pacific Invest Management Company (PIMCO), USA
Katherine Brown, Head of Sustainable and Impact Investing Initiatives, World Economic Forum
Jeffrey McDermott, Managing Partner, Greentech Capital Advisors, USA

Jeff Merritt, Head of IoT, Robotics & Smart Cities, World Economic Forum

Dalia Grybauskaite, President of Lithuania
Carolyn Tastad, Group President, North America, Procter & Gamble, USA
Rebecca Blumenstein, Deputy Managing Editor, New York Times, USA

10.45 - 11.45 Interactive Panel
**Female Leadership at a Tipping Point**

Marin Alsop, Conductor, Intermusica Artists’ Management, United Kingdom; Cultural Leader
Michelle Bachelet, United Nations High Commissioner for Human Rights, Geneva
Chrystia Freeland, Minister of Foreign Affairs of Canada
Dalia Grybauskaite, President of Lithuania
Carolyn Tastad, Group President, North America, Procter & Gamble, USA
Rebecca Blumenstein, Deputy Managing Editor, New York Times, USA

10.45 - 12.00 IdeasLab
**Novel Materials for Next-Generation Robotics with the University of Tokyo**

Takuzo Aida, Professor, Department of Chemistry and Biotechnology, University of Tokyo, Japan
Kanako Harada, Associate Professor, University of Tokyo, Japan
Shoji Takeuchi, Professor and Director, Center for International Research on Integrative Biomedical Systems, Institute of Industrial Science, University of Tokyo, Japan

Makoto Gonokami, President, University of Tokyo, Japan
Jamie Heller, Business Editor, Wall Street Journal, USA

11.00 - 12.00 Interactive Panel
**Entering a New Space Age**

Richard Ambrose, Executive Vice-President, Space Systems, Lockheed Martin Space Systems Company, USA
Sarah bint Yousef Al Amiri, Minister of State for Advanced Sciences of the United Arab Emirates
Alice Bunn, Director, International, UK Space Agency, United Kingdom
Kevin Delaney, Co-Chief Executive Officer and Editor-in-Chief, Quartz - Atlantic Media, USA

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Alice Bunn, Director, International, UK Space Agency, United Kingdom
Kevin Delaney, Co-Chief Executive Officer and Editor-in-Chief, Quartz - Atlantic Media, USA
Thursday
24 January

11.00 - 12.00 Interactive Panel
**The Promise and Progress of Bio-Engineering**

Clifford Brangwynne, Associate Professor, Princeton University, USA
Emily Carter, Dean, School of Engineering and Applied Science; Gerhard R. Andlinger Professor in Energy and the Environment, Princeton University, USA
Bernardo Gradin, Chief Executive Officer, GranBio Investimentos, Brazil
Jodi Halpern, Professor of Bioethics and Medical Humanities, University of California, Berkeley, USA
Mike Levine, Director, Lewis-Sigler Institute for Integrative Genomics, Princeton University, USA
Lee Sang-Yup, Distinguished Professor and Dean, Korea Advanced Institute of Science and Technology (KAIST), Republic of Korea

11.00 - 12.00 Interactive Panel
**A Jobs Creation Strategy for the Fourth Industrial Revolution**

Sharan Burrow, General Secretary, International Trade Union Confederation (ITUC), Belgium
Alain Dehaze, Chief Executive Officer, Adecco Group, Switzerland
Muriel Pénicaud, Minister of Labour of France
Hans Vestberg, Chief Executive Officer, Verizon Communications, USA
Rana Foroohar, Global Business Columnist and Associate Editor, Financial Times, USA
Saadia Zahidi, Managing Director, Head of the Centre for the New Economy and Society, World Economic Forum

11.00 - 12.00 Televised Session
**Shaping the Future of Finance**

Mark Carney, Governor of the Bank of England

11.00 - 12.00 Interactive Panel
**The Promise and Progress of Bio-Engineering**

Mary Callahan Erdoes, Chief Executive Officer, Asset and Wealth Management, JPMorgan Chase & Co., USA
Sergio P. Ermotti, Group Chief Executive Officer, UBS, Switzerland
Jörg Kukies, State Secretary for Financial Market Policy and European Policy, Federal Ministry of Finance of Germany
Christine Lagarde, Managing Director, International Monetary Fund (IMF), Washington DC
Hugo Shong, Founding Chairman, IDG Capital, People’s Republic of China
Geoff Cutmore, Anchor, CNBC, United Kingdom

11.30 - 12.00 Plenary Session
**Special Address by António Guterres, Secretary-General of the United Nations**

Antonio Guterres, Secretary-General, United Nations, New York
Borge Brende, President; Member of the Managing Board, World Economic Forum

11.30 - 12.00 Plenary Session
**Ask About: Securing Cyber Systems**

Myriam Dunn Cavelty, Deputy Head, Research and Teaching, Center for Security Studies, ETH Zürich, Switzerland

11.30 - 12.00 Hub Session
**A Conversation with Sebastian Kurz, Federal Chancellor of Austria**

Sebastian Kurz, Federal Chancellor of Austria; Young Global Leader
Markus Preiß, Bureau Chief, Brussels, ARD, Belgium

12.15 - 12.45 Hub Session
**The Big Picture on Our Oceans**

Heather Koldewey, Fellow, National Geographic Society, USA
Jim Leape, William and Eva Price Senior Fellow, Woods Institute; Co-Director, Center for Ocean Solutions, Stanford University, USA
Gabriel O’Donnell, Principal Research Programmer, CMU CREATE Lab, Carnegie Mellon University, USA

12.30 - 14.00 Open Forum
**Loneliness: An Epidemic?**

Varun Venugopal Gupta, Director, Sustainable Growth, Mindful Life Mindful Work, India
Belinda Parmar, Chair Executive Officer, The Empathy Business, United Kingdom; Young Global Leader
Kim Samuel, Chair and President, Samuel Family Foundation; Director, Samuel Group, Canada
Laurie Santos, Professor of Psychology; Head, Silliman College, Yale University, USA
Edward Whiting, Director, Policy; Chief of Staff, Wellcome Trust, United Kingdom
Ronald Dahl, Director, Institute of Human Development, University of California, Berkeley, USA

12.30 - 14.00 Lunch Session
**The Transformational Force of Female Founders**

Laura Alber, Chief Executive Officer, Williams-Sonoma, USA
Justine Cassell, Associate Dean, Technology, Strategy and Impact, School of Computer Science, Carnegie Mellon University, USA
Rebeca Hwang Eun Young, Co-Founder, Rivet Ventures, USA; Young Global Leader H.R.H. Princess Reema Bint Bandar Al-Saud, Vice-President for Development and
Planning, Saudi Arabian General Sports Authority, Saudi Arabia; Young Global Leader
Stephanie Ruhle, Anchor and Correspondent, MSNBC, USA

12.30 - 14.00 Lunch Session
Catering to India’s Consumer Markets
Manpreet Badal, Minister of Finance and Planning of Punjab, India
Neelam Chhiber, Managing Director, Industree/Mother Earth, India
Dipali Goenka, Chief Executive Officer and Joint Managing Director Welspun India, Welspun India, India
Amitabh Kant, Chief Executive Officer, National Institution for Transforming India (NITI) Aayog, India
Sudarshan Mahajan, Founder, Tiny Monkey Stage, India
Armstrong Pame, Administrator, Government of Manipur, India; Young Global Leader
GV Ravi Shankar, Managing Director, Sequoia Capital India Advisors, India
Zara Ingilizian, Head of Consumer Industry and System Initiative; Member of the Executive Committee, World Economic Forum
Anil Gupta, Michael Dingman Chair in Strategy, Globalization and Entrepreneurship, University of Maryland, USA

Alison Tarditi, Chief Investment Officer, Commonwealth Superannuation Corporation, Australia
Martin Wolf, Associate Editor and Chief Economics Commentator, Financial Times, United Kingdom

12.30 - 14.00 Lunch Session
Return of the Strongman
Sharmeen Obaid Chinoy, Chief Executive Officer, SOC Films, Pakistan; Young Global Leader
João Doria, Governor of the State of São Paulo, Brazil
Kumi Naidoo, Secretary-General, Amnesty International, United Kingdom; Young Global Leader
Moisés Naim, Distinguished Fellow, Carnegie Endowment for International Peace, USA
Ngaire Woods, Dean, Blavatnik School of Government, University of Oxford, United Kingdom
James Harding, Co-Founder and Editor, United Kingdom

12.30 - 14.00 Lunch Session
Strategic Outlook on Central and Eastern Europe
Andrzej Duda, President of Poland
Ivan Krastev, Chairman, Centre for Liberal Strategies, Bulgaria
Petro Poroshenko, President of Ukraine
Luca Visentini, General Secretary, European Trade Union Confederation (ETUC), Belgium
Beatrice Weder di Mauro, President, Centre for Economic Policy Research (CEPR), United Kingdom; Young Global Leader

13.00 - 14.00 Televised Session
Putting Europe’s Union to the Test
Thomas Buberl, Chief Executive Officer, AXA, France; Young Global Leader
Cecilia Malmström, Commissioner for Trade, European Commission, Brussels
Enzo Moavero Milanesi, Minister of Foreign Affairs and International Cooperation of Italy
Timothy Snyder, Richard C. Levin Professor of History, Yale University, USA
Stéphanie Antoine, TV Anchor, France

12.30 - 14.00 Lunch Session
Advancing Africa’s Growth Agenda
Lesetja Kganyago, Governor of the South African Reserve Bank (SARB)
Adama Koné, Minister of Economics and Finance of Côte d’Ivoire
Justin Lin Yifu, Dean, Institute of New Structural Economics, Peking University
Penny Mordaunt, Secretary of State for International Development of the United Kingdom
Mthuli Ncube, Minister of Finance and Economic Development of Zimbabwe
Patrick Njeruoge, Governor of the Central Bank of Kenya
Elizabeth Rossiello, Chief Executive Officer, Founder, BitPesa, Senegal
John Rwangombwa, Governor of the National Bank of Rwanda
Kanini Mutooni, Managing Director, Toniic Institute, United Kingdom; Young Global Leader
Elsie S. Kanza, Head of Regional Strategies, Africa; Member of the Executive Committee, World Economic Forum; Young Global Leader

13.00 - 14.00 Televised Session
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Timothy Snyder, Richard C. Levin Professor of History, Yale University, USA
Stéphanie Antoine, TV Anchor, France

24, France
Thursday
24 January

13.00 - 14.00 Televised Session
Asia’s Bet on the Middle East

Fuad Hussein, Deputy Prime Minister for Economic Affairs and Minister of Finance of Iraq
Shinichi Kitaoka, President, Japan International Cooperation Agency (JICA), Japan
Sanjiv Singh, Chairman, Indian Oil Corporation, India
Sultan Ahmed bin Sulayem, Group Chairman and Chief Executive Officer, DP World, United Arab Emirates
Mohammad Al Tuwajri, Minister of Economy and Planning of Saudi Arabia
Mayssoun Azzam, Political Anchor, Al Arabiya, United Arab Emirates

13.30 - 14.00 Betazone
Creating Visions of Another World

Toshiyuki Inoko, Founder, teamLab, Japan; Cultural Leader
Milica Zec, Director, Film and Mixed Reality, New Reality Co., USA; Cultural Leader
Hiroko Kuniya, Special Editor-in-Chief, GLOBE, Asahi Shimbun, Japan

13.30 - 14.00 One-on-One
A Conversation with Omar Al Razzaz, Prime Minister of Jordan

Omar Al Razzaz, Prime Minister of Jordan
Hadley Gamble, Reporter and Anchor, CNBC, United Kingdom

13.30 - 14.00 Hub Session
The Big Picture on a Hothouse Earth

Johan Rockström, Director, Potsdam Institute for Climate Impact Research (PIK), Germany
Randy Sargent, Senior Systems Scientist, Carnegie Mellon University, USA

14.00 - 17.50 Retreat
Meaningful Life: Contemplating Meditation

Eve Ekman, Director, Training, Greater Good Science Center, University of California, Berkeley, USA
Hedy Kober, Associate Professor of Psychiatry and Psychology, Yale University, USA
Peter McBride, National Geographic Explorer, USA

14.30 - 15.00 Interactive Panel
Europe after Brexit

Jules Chappell, Managing Director, London & Partners, United Kingdom; Young Global Leader
Guy Standing, Research Professor in Development Studies, University of London, United Kingdom
Martin Wolf, Associate Editor and Chief Economics Commentator, Financial Times, United Kingdom
Sally Bundock, News Presenter, World Business Report, BBC World News, United Kingdom

14.30 - 15.00 Betazone
Searching for Truth

Eyal Weizman, Professor of Spatial and Visual Cultures, Goldsmiths, University of London, United Kingdom; Cultural Leader
Antonio Vitorino, Director-General, International Organization for Migration (IOM), Geneva
Isabelle Kumar, Journalist and Presenter, Euronews, France

14.30 - 15.30 Interactive Panel
Realizing the Data Economy
Joanna Bryson, Associate Professor, Department of Computer Science, University of Bath, United Kingdom
Brian Duperreault, President and Chief Executive Officer, AIG, USA
Andrew Jassy, Chief Executive Officer, Amazon Web Services, USA
Robert F. Smith, Chairman and Chief Executive Officer, Vista Equity Partners, USA

14.30 - 15.30 Interactive Panel
Into the Dark: Globalized Crime
Karin von Hippel, Director-General, Royal United Services Institute for Defence and Security Studies, United Kingdom
Sergio Moro, Minister of Justice and Public Security of Brazil
Jürgen Stock, Secretary-General, International Criminal Police Organization (INTERPOL), Lyon
Ilona Szabó de Carvalho, Executive Director, Igarapé Institute, Brazil; Young Global Leader

14.30 - 15.45 Interactive Panel
Flying Cars and Designing for the New Aerial Logistics
Dirk Carsten Hoke, Chief Executive Officer, Airbus Defence and Space, Germany; Young Global Leader
Fang Liu, Secretary-General, International Civil Aviation Organization (ICAO), Montreal
Henry Ross Perot Jr, Chairman of the Board, Perot Companies, USA
Ion Yadigaroglu, Managing Partner, Capricorn Investment Group, USA
Timothy Reuter, Project Head, Civil Drones, World Economic Forum
Gideon Lichfield, Editor-in-Chief, MIT - Technology Review, USA

14.30 - 15.45 Interactive Panel
Scaling Up Solutions for Supply Chain Traceability
Leanne Kemp, Chief Executive Officer and Founder, Everledger, United Kingdom
Eytan Stibbe, Founding Partner, Vital Capital Fund, Switzerland
Olajumoke Adekeye, Founder, The Young Business Agency, Nigeria
Niall Murphy, Founder and Chief Executive Officer, EVRYTHING, United Kingdom

14.30 - 15.45 Interactive Panel
The Secrets to Healthy Longevity with the European Research Council
Constantinos Demetriades, Research Group Leader, Max Planck Institute for Biology of Ageing, Germany
Virpi Lummaa, Academy Professor, University of Turku, Finland
Linda Partridge, Managing Director, Max Planck Institute for Biology of Ageing, Germany
Jean-Pierre Bourguignon, President, European Research Council, Brussels
Magdalena Skipper, Editor-in-Chief, Nature, Nature Research, USA

14.30 - 15.45 Interactive Panel
Transforming the Plastics Economy
Jim Fitterling, Chief Executive Officer, Dow Chemical Company, USA
Ramon Laguarta, Chairman-elect and Chief Executive Officer, PepsiCo, USA
Brune Poirson, Secretary of State, Ministry of Ecology, Sustainable Development and Energy of France
James Quincey, Chief Executive Officer, The Coca-Cola Company, USA
Tran Hong Ha, Minister of Natural Resources and Environment of Viet Nam
Sara Eisen, Co-Anchor, Squawk on the Street and Closing Bell, CNBC, USA

14.30 - 15.30 Interactive Panel
Realizing the Data Economy
Joanna Bryson, Associate Professor, Department of Computer Science, University of Bath, United Kingdom
Brian Duperreault, President and Chief Executive Officer, AIG, USA
Andrew Jassy, Chief Executive Officer, Amazon Web Services, USA
Robert F. Smith, Chairman and Chief Executive Officer, Vista Equity Partners, USA

14.30 - 15.45 Interactive Panel
Flying Cars and Designing for the New Aerial Logistics
Dirk Carsten Hoke, Chief Executive Officer, Airbus Defence and Space, Germany; Young Global Leader
Fang Liu, Secretary-General, International Civil Aviation Organization (ICAO), Montreal
Henry Ross Perot Jr, Chairman of the Board, Perot Companies, USA
Ion Yadigaroglu, Managing Partner, Capricorn Investment Group, USA
Timothy Reuter, Project Head, Civil Drones, World Economic Forum
Gideon Lichfield, Editor-in-Chief, MIT - Technology Review, USA

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<td>Hub Session</td>
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<td>Ian Goldin, Professor of Globalization and Development; Director, Oxford Martin Programme on Technological and Economic Change, Oxford Martin School, University of Oxford, United Kingdom</td>
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<td>Ernest Chua Kian Jon, Associate Professor, National University of Singapore, Singapore</td>
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<td>One-on-One</td>
<td>An Insight, An Idea with Denis Mukwege, Nobel Peace Laureate 2018</td>
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<td>Denis Mukwege, Founder, Panzi Hospital and Foundation, Democratic Republic of Congo</td>
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<td>Ask About: Net-Zero-Energy Buildings</td>
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<td>Khee Poh Lam, Dean, School of Design and Environment, National University of Singapore, Singapore</td>
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<td>The Pride Momentum</td>
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<td>Beth A. Brooke-Marciniak, Global Vice-Chair, Public Policy, EY, USA</td>
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<td>Richard W. Edelman, President and Chief Executive Officer, Edelman, USA</td>
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<td>Karan Johar, Head, Dharma Productions, India; Cultural Leader</td>
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<td>Kenneth Roth, Executive Director, Human Rights Watch, USA</td>
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<td>Richard Quest, Anchor, Quest Means Business, CNN International, USA</td>
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<td>Defending the Shared Space</td>
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<td>Dominic Barton, Chairman, Teck Resources, Canada</td>
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<td>Jeanne Bourgault, President, Internews, USA</td>
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<td>Debbie Stothard, Secretary-General, International Federation for Human Rights (FIDH), France</td>
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<td>Timothy Snyder, Richard C. Levin Professor of History, Yale University, USA</td>
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<td>Plenary Session</td>
<td>A Conversation with Mohammad Ashraf Ghani, President of the Islamic Republic of Afghanistan</td>
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<td>Fareed Zakaria, Host, Fareed Zakaria GPS, CNN, USA</td>
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<td>15.30 - 16.15</td>
<td>Issue Briefing</td>
<td>Rethinking Taxes: Creating a Fair and Balanced System</td>
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<td>Paschal Donohoe, Minister for Finance of Ireland</td>
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<td>Angel Gurría, Secretary-General, Organisation for Economic Co-operation and Development (OECD), Paris</td>
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<td>Bastian Obermayer, Head of Investigation, Süddeutsche Zeitung, Germany</td>
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<td>Mark Pieth, Chairman of the Board, Basel Institute on Governance, Switzerland</td>
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<td>Heather Long, Economics Correspondent, Washington Post, USA</td>
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<td>Stacey Cunningham, President and Chief Executive Officer, NYSE, USA</td>
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<td>Brian T. Moynihan, Chairman and Chief Executive Officer, Bank of America Corporation, USA</td>
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<td>David M. Rubenstein, Co-Founder and Co-Executive Chairman, Carlyle Group, USA</td>
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<td>Elizabeth H. Shuler, Secretary-Treasurer and Chief Financial Officer, American Federation of Labor and Congress of Industrial Organizations (AFL-CIO), USA</td>
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<td>Matthew Murray, Editor-in-Chief, Wall Street Journal, USA</td>
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16.00 - 17.00 Interactive Panel
**Learning Today for Tomorrow’s Jobs**

*Julie Gebauer*, Head, Global Business Segment, Human Capital and Benefits, Willis Towers Watson, USA

*Adam Grant*, Saul P. Steinberg Professor of Management and Psychology, Wharton School, University of Pennsylvania, USA; Young Global Leader

*Christy Hoffman*, General Secretary, UNI Global Union, Switzerland

*Guy Ryder*, Director-General, International Labour Organization (ILO), Geneva

*Bill Thomas*, Global Chairman, KPMG, Canada

*Henry Blodget*, Chief Executive Officer and Editor-in-Chief, Business Insider, USA

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16.00 - 17.00 Interactive Panel
**Climate Leadership**

*Rachel Kyte*, Special Representative of the Secretary-General for Sustainable Energy for All; Chief Executive Officer, United Nations Sustainable Energy for All (SEforALL), Vienna

*Ma Jun*, Chairman, China Green Finance Committee, People’s Republic of China

*Christian Mumenthaler*, Group Chief Executive Officer, Swiss Re Group, Switzerland; Young Global Leader

*Mark Rutte*, Prime Minister of the Netherlands

*Feike Sybesma*, Chief Executive Officer and Chairman of the Managing Board, Royal DSM, Netherlands

*Andy Serwer*, Editor-in-Chief, Yahoo Finance, USA

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16.00 - 17.00 Interactive Panel
**Alzheimer’s: A Global Call for Action**

*Andrea Pfeifer*, Chief Executive Officer, AC Immune, Switzerland

*Paul Stoffels*, Vice-Chairman and Chief Scientific Officer, Johnson & Johnson, USA

*Michel Vounatsos*, Chief Executive Officer, Biogen, USA

*P. Murali Doraiswamy*, Professor of Psychiatry and Medicine, Duke University Medical Center, USA

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16.15 - 16.45 Hub Session
**Voice for the Planet**

*Marco Lambertini*, Director-General, WWF International, Switzerland

*Neeshad Shafi*, Design Engineer, Metito Overseas, Qatar

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16.30 - 17.00 One-on-One
**Digital Trust and Transformation: A Conversation with Marc Benioff**

*Marc Benioff*, Chairman and Co-Chief Executive Officer, Salesforce, USA

*Klaus Schwab*, Founder and Executive Chairman, World Economic Forum

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16.30 - 17.15 Interactive Panel
**Shaping the Green Transition**


*Jennifer Morgan*, Executive Director, Greenpeace International, Netherlands

*Sumant Sinha*, Chairman and Managing Director, ReNew Power, India

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16.30 - 17.45 xChange
**How Autonomous Vehicles Earn Trust**

*Cynthia Breazeal*, Associate Professor, Media Arts and Sciences, Massachusetts Institute of Technology (MIT), USA

*Raphael Gindrat*, Co-Founder, Chief Executive Officer, Bestmile, Switzerland

*Iim Fahima Jachja*, Founder and Chief Executive Officer, Queenrides, Indonesia; Young Global Leader

*Andreas Renschler*, Member of the Board of Management, Volkswagen, Germany

*Jean Todt*, President, Fédération Internationale de l’Automobile (FIA), France

*Michelle Avary*, Project Head, Autonomous and Urban Mobility, World Economic Forum

*Tim Brown*, Chief Executive Officer, IDEO, USA

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16.30 - 17.45 IdeasLab
**Developing a Vaccine Revolution with Imperial College London**

*Wendy Barclay*, Action Medical Research Chair, Virology, Imperial College London, United Kingdom

*Jason Hallett*, Professor of Sustainable Chemical Technology, Imperial College London, United Kingdom

*Robin Shattock*, Chair, Mucosal Infection and Immunity, Imperial College London, United Kingdom

*Alice Gast*, President, Imperial College London, United Kingdom

*Jeffrey M. Drazen*, Editor-in-Chief, New England Journal of Medicine, USA
Thursday
24 January

16.45 - 17.15 Hub Session
Ask About: Cyber-Physical Risk
Srdjan Capkun, Director, Zurich Information Security and Privacy Center, ETH Zurich, Switzerland

17.00 - 17.30 Issue Briefing
Futureproofing Cybersecurity
Kelly Bissell, Senior Managing Director, Accenture Security, Accenture, USA
Dmitry Samartsev, Chief Executive Officer, Bi.Zone, Russian Federation
Michelle Zatlyn, Co-Founder and Chief Operating Officer, Cloudflare, USA; Young Global Leader
Troels Oerting Jorgensen, Head of the Centre for Cybersecurity, World Economic Forum

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17.15 - 18.00 Plenary Session
Africa’s Leadership in the New Global Context
Paul Kagame, President of Rwanda
Cyril M. Ramaphosa, President of South Africa
Kristalina Georgieva, Chief Executive Officer, World Bank, Washington DC

17.30 - 18.00 Hub Session
Ask About: Big Data for Mental Health
Leanne Williams, Professor of Psychiatry and Behavioural Sciences, Stanford University, USA

17.30 - 18.15 Interactive Panel
Religion and Globalization
Kezevino Aram, Director, Shanti Ashram, India
Pinchas Goldschmidt, Chief Rabbi and President, Conference of European Rabbis, Russian Federation
Ahmad Iravani, President and Executive Director, Center for the Study of Islam and the Middle East (CSIME), USA
Peter Kodwo Appiah Turkson, Cardinal, Prefect of the Dicastery for Promoting Integral Human Development of the Vatican City State
Mina Al-Oraibi, Editor-in-Chief, The National, United Arab Emirates; Young Global Leader

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17.30 - 18.30 Interactive Panel
Identity in a Digital World
Katharina Borchert, Chief Open Innovation Officer, Mozilla, USA; Young Global Leader
Leanne Kemp, Chief Executive Officer and Founder, Everledger, United Kingdom

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17.30 - 18.30 Interactive Panel
Resetting Financial Governance
Mark Carney, Governor of the Bank of England
Haruhiko Kuroda, Governor of the Bank of Japan
Charles Li, Chief Executive, Hong Kong Exchanges and Clearing (HKEx), Hong Kong SAR, China
David A. Lipton, First Deputy Managing Director, International Monetary Fund (IMF), Washington DC
Cecilia Skingsley, Deputy Governor of the Central Bank of Sweden (Sveriges Riksbank)
Adam Tooze, Shelby Cullom Davis Chair of History, Columbia University, USA

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17.30 - 18.30 Interactive Panel
The Future of the Transatlantic Alliance
Jacek Czaputowicz, Minister of Foreign Affairs of Poland
John F. Kerry, Distinguished Fellow for Global Affairs, Yale University, USA
Ursula von der Leyen, Federal Minister of Defence of Germany
Kishore Mahbubani, Senior Adviser and Professor in the Practice of Policy, National University of Singapore, Singapore
Jens Stoltenberg, Secretary-General, North Atlantic Treaty Organization (NATO), Brussels
Wolfgang Ischinger, Chairman, Munich Security Conference, Germany

17.30 - 18.30 Interactive Panel
The Business Case for Disability Inclusion

Peter T. Grauer, Chairman, Bloomberg, USA
Paul Polman, Chief Executive Officer, Unilever, United Kingdom
Julie Sweet, Chief Executive Officer, North America, Accenture, USA
Duncan Tait, President and Chief Executive Officer, Europe, Middle East, India and Africa, Fujitsu, United Kingdom
Carolyn Tastad, Group President, North America, Procter & Gamble, USA
Caroline Casey, Founder, Binc, Ireland; Young Global Leader, Cultural Leader

18.30 - 20.30 Open Forum
The Price of Free

Kailash Satyarthi, Founder, Kailash Satyarthi Children’s Foundation, India
Shereen Bhan, Managing Editor, CNBC-TV18, India

19.15 - 22.50 Dinner Session
Sensory Dinner in the Dark

Gina Badenoch, Founder, Capaxia, United Kingdom; Young Global Leader, Cultural Leader

20.00 - 22.00 Dinner Session
Innovative Arab World

Basima Abdulrahman, Founder and Chief Executive Officer, KESK Green Building Consulting, Iraq; Cultural Leader
Alain Bejani, Chief Executive Officer, Majid Al Futtaim Holding, United Arab Emirates
Mohammed ElKuwaiz, Chairman, Capital Market Authority, Saudi Arabia
Rasheed Al Maraj, Governor of the Central Bank of Bahrain
Yousuf Mohamed Al-Jaida, Chief Executive Officer, Qatar Financial Centre (QFC), Qatar
H.R.H. Princess Reema Bint Bandar Al-Saud, Vice-President for Development and Planning, Saudi Arabian General Sports Authority, Saudi Arabia; Young Global Leader
Khalid Al Rumaihi, Chief Executive, Bahrain Economic Development Board, Bahrain
Mohamed Ali Alhakim, Minister of Foreign Affairs of Iraq
Mohammed Alshaya, Executive Chairman, Alshaya Group, Kuwait
Fuad Hussein, Deputy Prime Minister for Economic Affairs and Minister of Finance of Iraq
Amre Moussa, Secretary-General of the League of Arab States (2001-2011); Head of the Constitution of Fifty, Egypt
Omar Al Razzaz, Prime Minister of Jordan
Muhammad Shehadeh, Minister of Investment Affairs of the Hashemite Kingdom of Jordan
Maysoun Azzam, Political Anchor, Al Arabiya, United Arab Emirates
Mirek Dusek, Deputy Head of Regional and Geopolitical Affairs; Member of the Executive Committee, World Economic Forum

20.00 - 22.00 Dinner Session
Art as Politics

Marin Alsop, Conductor, Intermusica Artists’ Management, United Kingdom; Cultural Leader
Sinéad Burke, Founder, Sinéad Burke, Ireland; Cultural Leader
Patrick Chappatte, Editorial Cartoonist & Founder, Globe Cartoon, Switzerland; Young Global Leader, Cultural Leader
Karan Johar, Head, Dharma Productions, India; Cultural Leader
Chiara Tilesi, Founder and President of the Board of Directors, We Do It Together, USA; Cultural Leader
will.i.am, Founder and Chief Executive Officer, I.AM.PLUS, USA; Cultural Leader
Platon, Photographer and Founder, People’s Portfolio, USA; Cultural Leader

20.00 - 22.00 Dinner Session
Beyond the Horizon

Ernst Bromeis, Water Ambassador, The Blue Miracle, Switzerland
Rena Effendi, Photographer, Turkey; Cultural Leader
Jane Goodall, Founder, Jane Goodall Institute, USA
Heather Koldewey, Fellow, National Geographic Society, USA
Peter McBride, National Geographic Explorer, USA
Skye Meaker, Photographer, Skye Meaker Photography, South Africa; Cultural Leader
Enric Sala, Explorer-in-Residence, National Geographic Society, USA; Young Global Leader
Sebastian Kurz, Chancellor of Austria
will.i.am interacts with the musical chandelier

Ana Botín in the session The New Impetus for Europe

Novel Materials for Next-Generation Robotics with the University of Tokyo

Session Loneliness: An Epidemic?
Friday
25 January

08.15 - 08.45 Meditation
Morning Meditation
Tsoknyi Rinpoche, Founder, Pundarika Foundation, USA

08.30 - 12.20 Retreat
Meaningful Life: Discovering Happiness
Tsoknyi Rinpoche, Founder, Pundarika Foundation, USA
Emiliana Simon-Thomas, Director, Science, Greater Good Science Center, University of California, Berkeley, USA

09.00 - 09.30 Hub Session
Ask About: Green Fuels
Bin Liu, Head, Department of Chemical and Biomolecular Engineering, National University of Singapore, Singapore

09.00 - 09.45 Interactive Panel
Preparing for Future Migration Scenarios
Natalia Kanem, Executive Director, United Nations Population Fund (UNFPA), New York
Eyal Weizman, Professor of Spatial and Visual Cultures, Goldsmiths, University of London, United Kingdom; Cultural Leader
Sara Pantuliano, Acting Executive Director, Overseas Development Institute, United Kingdom

09.00 - 10.00 Interactive Panel
The Future of Hospitals
Nancy Brown, Chief Executive Officer, American Heart Association, USA
Helen E. Clark, Prime Minister of New Zealand (1999-2008)
Frans van Houten, Chief Executive Officer, Royal Philips, Netherlands
Shobana Kamineni, Executive Vice-Chairperson, Apollo Hospitals Enterprise, India
Stephen Klasko, President and Chief Executive Officer, Jefferson Health, USA
Prasanth Manghat, Chief Executive Officer, NMC Healthcare, United Arab Emirates

Luciano Huck, Host, Rede Globo, Brazil
Kishore Mahbubani, Senior Adviser and Professor in the Practice of Policy, National University of Singapore, Singapore
Alicia Bárcena Ibarra, Executive Secretary, United Nations Economic Commission for Latin America and the Caribbean (ECLAC), Santiago

Fatih Birol, Executive Director, International Energy Agency, Paris
Kirill Dmitriev, Chief Executive Officer, Russian Direct Investment Fund, Russian Federation; Young Global Leader
Majid Jafar, Chief Executive Officer, Crescent Petroleum, United Arab Emirates; Young Global Leader
Meghan O’Sullivan, Jeane Kirkpatrick Professor of the Practice of International Affairs and Director, Geopolitics of Energy Project, Harvard University, USA
John Defterios, Editor, Emerging Markets; Anchor, CNNMoney, United Arab Emirates
Vanessa Candeias, Head, Shaping the Future of Health and Healthcare; Member of the Executive Committee, World Economic Forum

09.00 - 10.00 Televised Session
A ‘Fourth Social Revolution’?

Winnie Byanyima, Executive Director, Oxfam International, Kenya
Hilary Cottam, Author and Entrepreneur, Centre for the Fourth Social Revolution, United Kingdom; Young Global Leader
Amitabh Kant, Chief Executive Officer, National Institution for Transforming India (NITI) Aayog, India
Robert E. Moritz, Global Chairman, PwC International, PwC, USA
Subramanian Rangan, The Abu Dhabi Crown Prince Court Endowed Chair in Societal Progress, INSEAD, France
Sarah Kelly, Anchor-at-Large, Deutsche Welle, USA

09.00 - 10.00 Interactive Panel
Combating Cancer

Julie Louise Gerberding, Executive Vice-President and Chief Patient Officer, Strategic Communications, Global Public Policy and Population Health, MSD, USA
Hiroshi Mititani, Chairman and Chief Executive Officer, Rakuten, Japan
Siddhartha Mukherjee, Assistant Professor of Medicine, Columbia University, USA
Jens Spahn, Federal Minister of Health of Germany; Young Global Leader
Clifton Leaf, Editor-in-Chief, Fortune Magazine, USA

Andrew Thompson, Co-Founder and Chief Executive Officer, Proteus Digital Health, USA
Philip Campbell, Editor-in-Chief, Springer Nature, United Kingdom

09.00 - 10.30 Workshop
What Should Globalization 4.0 Look Like?

James Chin Moody, Chief Executive Officer, Sendle, Australia; Young Global Leader
Lynda Gratton, Professor of Management Practice, London Business School, United Kingdom
Avril Haines, Senior Research Scholar, Columbia University, USA
Lee Sang-Yup, Distinguished Professor and Dean, Korea Advanced Institute of Science and Technology (KAIST), Republic of Korea
Axel P. Lehmann, President, Personal and Corporate Banking; President, Switzerland, UBS, Switzerland
Mariana Mazzucato, Professor of Economics of Innovation and Public Value; Founder and Director, Institute for Innovation and Public Purpose, University College London (UCL), United Kingdom
Jane Nelson, Director, Corporate Responsibility Initiative, Harvard Kennedy School of Government, USA
Cristiana Pasca Palmer, Executive Secretary, Convention on Biological Diversity, Montreal
Samir Saran, President, Observer Research Foundation (ORF), India
Lisa Witter, Co-Founder and Executive Chairman, Apolitical, Germany; Young Global Leader

09.00 - 10.00 xChange
Closing the Loop on Electronics

Mark Cutifani, Chief Executive, Anglo American, United Kingdom
Naoko Ishii, Chief Executive Officer and Chairperson, Global Environment Facility, Washington DC
Ellen MacArthur, Founder, Ellen MacArthur Foundation, United Kingdom
Jeroen Tas, Chief Innovation and Strategy Officer, Royal Philips, Netherlands
Thani Ahmed Al Zeyoudi, Minister of Climate Change and Environment of the United Arab Emirates
Christina Lampe-Onnerud, Founder and Chief Executive Officer, Cadenza Innovation, USA
William McDonough, Adjunct Professor, Department of Civil and Environmental Engineering, Stanford University, USA
Akira Sakano, Chair, Board of Directors, Zero Waste Academy Japan, Japan
Andrew Steer, President and Chief Executive Officer, World Resources Institute, USA

09.00 - 10.15 Experience
A Day in the Life of a Refugee

Sarah bint Yousif Al Amiri, Minister of State for Advanced Sciences of the United Arab Emirates
Jean-Pierre Bourgignon, President, European Research Council, Brussels
Martina Hirayama, State Secretary for Education and Research and Innovation of Switzerland
Shellie Sairras, Medical Researcher, Academic Hospital Paramaribo, Suriname

09.00 - 10.30 Open Forum
Bridging Science with Society

Sarah bint Yousif Al Amiri, Minister of State for Advanced Sciences of the United Arab Emirates
Jean-Pierre Bourgignon, President, European Research Council, Brussels
Martina Hirayama, State Secretary for Education and Research and Innovation of Switzerland
Shellie Sairras, Medical Researcher, Academic Hospital Paramaribo, Suriname

Andrew Thompson, Co-Founder and Chief Executive Officer, Proteus Digital Health, USA
Philip Campbell, Editor-in-Chief, Springer Nature, United Kingdom

Sessions with this icon can be watched online
https://www.weforum.org/events/world-economic-forum-annual-meeting
Friday
25 January

Ngaire Woods, Dean, Blavatnik School of Government, University of Oxford, United Kingdom
Robin Niblett, Director, Chatham House, United Kingdom

09.15 - 09.45 Hub Session
The Big Picture on Globalization
Ian Goldin, Professor of Globalization and Development; Director, Oxford Martin Programme on Technological and Economic Change, Oxford Martin School, University of Oxford, United Kingdom
Ilollah Nourbakhsh, Professor, Robotics Institute, Carnegie Mellon University, USA

09.15 - 10.00 Interactive Panel
Rethinking the Value of Freedom
Joanna Bryson, Associate Professor, Department of Computer Science, University of Bath, United Kingdom
Timothy Snyder, Richard C. Levin Professor of History, Yale University, USA

09.15 - 10.30 Interactive Panel
Preparing for Climate Disruption
John J. Haley, Chief Executive Officer, Willis Towers Watson, USA
Mark D. Okerstrom, President and Chief Executive Officer, Expedia Group, USA
Ngozi Okonjo-Iweala, Chair, the Secretary-General for Sustainable Development; Director, NITI Aayog, India
Amitabh Kant, Chief Executive Officer, OVG Real Estate, Switzerland

10.15 - 11.00 Interactive Panel
The Next Upheaval: Food Crisis
J. Erik Fyrwald, Chief Executive Officer, Syngenta International, Switzerland
Neal Keny-Guyer, Chief Executive Officer, Mercy Corps, USA
Augustine P. Mahiga, Minister of Foreign Affairs and East African Cooperation of Tanzania
Heba Aly, Director, IRIN, Switzerland; Young Global Leader

10.15 - 11.15 Interactive Panel
What If: Everyone Had Their Genome Sequenced at Birth?
Stéphane Bancel, Chief Executive Officer, Moderna Therapeutics, USA; Young Global Leader
Jay Flatley, Executive Chairman, Illumina, USA
Jodi Halpern, Professor of Bioethics and Medical Humanities, University of California, Berkeley, USA
Matt Hancock, Secretary of State for Health and Social Care of the United Kingdom
Elizabeth ODay, Founder and Chief Executive Officer, Olaris Therapeutics, USA

10.15 - 11.15 Interactive Panel
A New Kind of Learning?
John Goodwin, Chief Executive Officer, LEGO Foundation, Denmark
Hadi Partovi, Founder and Chief Executive Officer, Code.org, USA
Mamokgethi Phakeng, Vice-Chancellor, University of Cape Town, South Africa
Andria Zafirakou, Teacher and Textile, Alperton Community School, United Kingdom; Cultural Leader
Justine Cassell, Associate Dean, Technology, Strategy and Impact, School of Computer Science, Carnegie Mellon University, USA

09.45 - 10.15 Hub Session
Ask About: Mechanisms of Ageing
Linda Partridge, Managing Director,Max Planck Institute for Biology of Ageing, Germany

10.15 - 11.10 Interactive Panel
Enhancing Energy Efficiency
Kim Faus ing, President and Chief Executive Officer, Danfoss, Denmark
Amitabh Kant, Chief Executive Officer, National Institution for Transforming India (NITI) Aayog, India
Rachel Kyte, Special Representative of the Secretary-General for Sustainable Energy for All, United Nations Sustainable Energy for All (SEforALL), Vienna
Coen van Oostrom, Founder and Chief Executive Officer, OVG Real Estate, Netherlands; Young Global Leader

10.30 - 11.00 One-on-One
Training Grandmothers to Treat Depression
Ishaan Tharoor, Staff Writer, Foreign Affairs, Washington Post, USA
Dixon Chibanda, Director, African Mental Health Research Initiative (AMARI), Zimbabwe

10.30 - 11.00 Hub Session
Ask About: Mindfulness and Emotions
Hedy Kober, Associate Professor of Psychiatry and Psychology, Yale University, USA
10.30 - 11.00 Hub Session

The Big Picture on Our Oceans

Heather Koldewey, Fellow, National Geographic Society, USA
Douglas McCauley, Professor, University of California, Santa Barbara, USA
Gabriel O’Donnell, Principal Research Programmer, CMU CREATE Lab, Carnegie Mellon University, USA

10.30 - 11.30 Televised Session

Making Globalization 4.0 Work for All

Richard Baldwin, Professor of International Economics, Graduate Institute of International and Development Studies, Switzerland
Laurence Boone, Chief Economist, Organisation for Economic Co-operation and Development (OECD), Paris
Hikmet Ersek, President and Chief Executive Officer, Western Union Company, USA
Tadashi Maeda, Governor and Representative Director, Japan Bank for International Cooperation (JBIC), Japan
Kenji Kohno, General Director, General Bureau for America; Executive Editor, NHK (Japan Broadcasting Corporation), Japan

10.30 - 11.30 Interactive Panel

Agility at All Costs?

Paul Bulcke, Chairman of the Board, Nestlé, Switzerland
Simon Freakley, Chief Executive Officer, AlixPartners, USA
André Kudelski, Chairman of the Board and Chief Executive Officer, Kudelski Group, Switzerland
Maurice Lévy, Chairman of the Supervisory Board, Publicis Groupe, France
Bonnie Gwin, Vice-Chairman and Co-Managing Partner, Chief Executive Officer and Board Practice, Heidrick & Struggles, USA

11.00 - 11.30 Issue Briefing

Is the West Paralysed?

Kishore Mahbubani, Senior Adviser and Professor in the Practice of Policy, National University of Singapore, Singapore
Ngaire Woods, Dean, Blavatnik School of Government, University of Oxford, United Kingdom
Richard Samans, Managing Director; Head of Policy and Institutional Impact, World Economic Forum

12.30 - 12.45 Plenary Session

Closing Remarks: The Road Ahead

Børge Brende, President; Member of the Managing Board, World Economic Forum
W. Lee Howell, Managing Director; Head of Global Programming, World Economic Forum

12.45 - 13.00 Concert

Closing Performance

Robert F. Smith, Chairman and Chief Executive Officer, Vista Equity Partners, USA
Sterling Elliott, Student Musician, Sphinx Orchestra, USA
Randall Goosby, Musician, Sphinx Virtuosi Orchestra, USA
Hannah White, Student Musician, Sphinx Orchestra, USA
Mira Williams, Student Musician, Sphinx Orchestra, USA

13.00 - 15.00 Reception

Farewell Lunch at the Schatzalp

10.30 - 11.30 TV Session

The Cost of Inequality

Alicia Bárcena Ibarra, Executive Secretary, United Nations Economic Commission for Latin America and the Caribbean (ECLAC), Santiago
Rutger Bregman, Author and Historian, De Correspondent, Netherlands
Winnie Byanyima, Executive Director, Oxfam International, Kenya
Jane Goodall, Founder, Jane Goodall Institute, USA
Shamina Singh, President, Mastercard Center for Inclusive Growth, Mastercard, USA; Young Global Leader
Edward Felsenthal, Editor-in-Chief, Time Magazine, USA

11.30 - 12.30 Plenary Session

Global Economy in Transition

Kristalina Georgieva, Chief Executive Officer, World Bank, Washington DC
Lesetja Kganyago, Governor of the South African Reserve Bank (SARB)
Haruhiko Kuroda, Governor of the Bank of Japan
Mariana Mazzucato, Professor of Economics of Innovation and Public Value; Founder and Director, Institute for Innovation and Public Purpose, University College London (UCL), United Kingdom
Christine Lagarde, Managing Director, International Monetary Fund (IMF), Washington DC
Greta Thunberg in the session Preparing for Climate Disruption

Virpi Lummaa in the Session The Secrets to Healthy Longevity with the European Research Council

Sphinx Virtuosi Orchestra

Ask About: Mechanisms of Ageing
How to shape a new global architecture

At the Annual Meeting 2019 there was a widespread sense that international relations and the world economy are at a turning point, reflected in the theme of the meeting, Globalization 4.0: Shaping a New Global Architecture in the Age of the Fourth Industrial Revolution. The essential thesis is that major shifts under way in technology, geopolitics, environment and society are combining to give birth to a new phase of globalization – Globalization 4.0 – whose trajectory will depend in large measure on how well governance at multiple levels – governmental, corporate and international – adapts to these changes. Strengthening our governance architecture to ensure its effectiveness in this new era will require deeper engagement and heightened imagination by all stakeholders, beginning with robust and sustained dialogue among them.

The context for governance and cooperation is changing due to the Fourth Industrial Revolution. Economies, businesses, societies and politics are being transformed by technological advances in such areas as artificial intelligence and machine learning, the internet of things, autonomous vehicles, drones, precision medicine and genomics, advanced materials, smart grids, robotics and big data. This wave of technological disruption is coinciding and interacting with three other, equally epochal, transformations in the global economic and political context. An increasingly urgent set of ecological imperatives, including but not limited to global warming; the growing multipolarity of international relations and plurilateralization of the world economy; and rising social discontent within many countries regarding the inequity of socioeconomic outcomes from economic growth.

To help move the discussion of Globalization 4.0 from diagnosis to action, during the Annual Meeting the Forum shared a consultation version of a draft White Paper to participants, titled Globalization 4.0: Shaping a New Global Architecture in the Age of the Fourth Industrial Revolution. The White Paper – to be published following the Annual Meeting – provides an overview of some of the important weaknesses in the world economy’s cooperative architecture that have been exposed by recent changes in its operating context. And it spotlights some of the most promising opportunities available to address these weaknesses, which are deserving of greater consideration and commitment by government, business and other leaders in Davos and beyond.

We encourage all members of the Forum’s network to respond to the call for engagement inherent in the Annual Meeting’s theme by thinking about how they and their organizations could contribute concretely to the policy and enabling architecture improvements needed in this new era, by supporting one or another of these initiatives or indeed by bringing others to the table.

The White Paper is available here for your review. Comments and suggestions on this consultation draft can be sent to G4.0@weforum.org.
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Digital Update

The event page of the Annual Meeting 2019 provides access to a richer level of content from the meeting, including videos, photographs, insights and webcasts of selected sessions. http://wef.ch/am19.

This report is also available to download in PDF or HTML format: http://wef.ch/am19report
Contributors

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Taking steps to sustainability

At the Annual Meeting 2019, the World Economic Forum reiterated its willingness to take responsibility for its event’s footprint. Since obtaining ISO 20121 certification in 2018 for “sustainable event management”, the Forum has successfully passed its first annual surveillance audit and confirmed that sustainability is improving at the event.

How was sustainability enhanced at the Annual Meeting this year?

Transport – While continuing to organize sustainable transport options for participants (promoting walking, with maps, paths and the distribution of shoe grips; an efficient shuttle service serving the main locations; free access to public buses), for the first time this year the Forum decided to reimburse 50% of the train ticket price for certain communities if they chose to come to Switzerland by train instead of flying. In addition, 50 fully electric vehicles were pilot-tested and included in the Forum’s fleet.

Resources – In continuing its efforts to use materials more efficiently, the Forum has worked with its Partners to reduce single-use plastic. Additional water stations were installed in the Congress Centre and the Media Village to enable the use of reusable water bottles. Integrating a circular economy approach, institutional publications are produced by a Cradle-to-Cradle certified printing company based in Switzerland.

As every year, the Annual Meeting’s carbon footprint is fully compensated in an internationally recognized way.

Read more about the Forum’s sustainability strategy here or by scanning this QR code.

Do you have any feedback? Please share it with us at sustainability@weforum.org
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