



PACE

PLATFORM FOR ACCELERATING
THE CIRCULAR ECONOMY

Annual Report

2019

Messages from the Co-chairs



PACE is a unique platform for practical action to move our world forward. Our economies have become global, but the principle of taking care of common resources has not — posing an ever-increasing threat to our aspirations for economic growth, jobs and security. We need a new way of doing business and to recreate the same kind of contracts that local communities found so effective in the past. But we must do so on a global scale — building new coalitions and partnerships to transform the key economic systems that support how we eat, how we move and how we produce and consume. One critical framework to change our world will be to shift from our take-make-waste economies to more “circular” models. The call for scale requires coalitions like PACE that are global, multisector and action-oriented. Bringing together business, researchers, communities and local and national governments on a common platform will help us align stakeholders around global issues. Join us in the PACE Community to bring solutions to scale and inspire the way forward for more companies and governments to enable a world that better serves all people.

Naoko Ishii

Co-Chair of the Board
CEO, Global Environment Facility



I firmly believe that the circular economy will replace the traditional “take-make-dispose” scheme. Large companies have a responsibility to lead the way. At Royal Philips, we drive the transition to a circular economy with innovative service models, smart upgrade paths and product take-back and remanufacturing programs. I see this both as a great driver for innovation and a source of sustainable value creation to achieve our mission to improve the lives of 3 billion people a year by 2030.

But no single organization can drive this transition alone. The biggest impact will come from collective action on a global scale. Companies, governments, and NGOs have to come together to truly co-create the future. That is why I am proud to co-chair PACE, the leader-led platform, initiated at the World Economic Forum, to accelerate the circular economy with action at scale. The PACE Community, with now close to 100 engaged CEOs, Ministers, and Heads of NGOs, is showing the way. In the coming years, we will continue to rally more countries, businesses and citizens to drive concrete action, scale-up by learning and exchanging best practices. There is still a long way to go and we need all the power to drive this systemic transition. We urge other leaders to join and commit to clear actions to apply circularity.

Frans van Houten

Co-Chair of the Board
CEO, Royal Philips



During 2019 the PACE Community continued to deliver circular economy solutions at greater scale and speed. We are excited to share some of those results in this inaugural PACE Annual Report. Additionally, this year was an important period of reflection and thinking as the PACE Board of Directors and other strategic partners worked together to design a new strategic framework to guide our collective action. While adding new thematic areas of work, the PACE Community pulled together to develop a first-in-time collective agenda for priority actions in plastics, electronics, food and fashion.

Major operational milestones were achieved in the PACE Community's evolution in line with the plans approved by PACE's Executive Committee in 2018, including the establishment of the inaugural Board of Directors, mobilization of the PACE Secretariat and delivering on new and growing expectations with our many stakeholders. This work resulted — at the close of the year — in PACE having an articulated vision, mission and values, a clearer vision for the role of PACE and its Community Members and a new set of strategic imperatives to guide our work in the coming years. During 2020, we will continue to build on this work to establish an even stronger evidence-base for our on-the-ground actions and policy influence agendas. We will continue to seek your insights and share our plans of action for 2020-21 to inspire public and

private leadership action on critical issues, deepen our understanding of the societal and environmental impacts of scaling circular solutions, and provide a clearer pathway towards the transition to a global circular economy.

Our vision invites us to imagine a world where our economic system enables human and environmental well-being. What would it mean to our organizations and world if each and every one of us had an inspired and effective group of leaders who were leveraging their full potential as strategists, ambassadors, connectors, and influencers for the circular economy? What evidence and communications efforts would we need in place to identify, activate and empower these leaders? And how much more impact could we have if our global leaders were truly aligned around a global transformation, and were singularly focused on delivering that change today through tangible action at scale through their respective organizations?

We believe that this future is possible, and are excited to share with you how our work in 2019 informed our thinking and planning. And we invite you to join us as we work to inspire and scale circular economy solutions around the world.

With appreciation,

David B. McGinty
Global Director



VISION

A global economic system that concurrently enables human and environmental well-being.

MISSION

To accelerate the transition to a global circular economy through adoption of circular economy approaches at scale that can improve human and environmental well-being for current and future generations.

VALUES

Our values are shared ideas that bind us together. They articulate who we are and what we believe, shape our goals, guide our actions, and help us explain our aspirations.

► **Collaboration** – PACE is a community of public, private and civil society partners who believe that the scale of change we seek requires collective action to understand, deliver, and scale solutions. Through a multi-stakeholder governance approach, PACE's work is informed by and accomplished

through community members and other partners. We believe in the power of global teamwork and that by working as one we can deliver exceptional outcomes.

► **Integrity** – We lead by being accountable to the people and partners with whom we collaborate and serve, transparently sharing our results, stories and lessons. We challenge ourselves to the highest level of learning and performance, tapping the best of the human spirit to create impact.

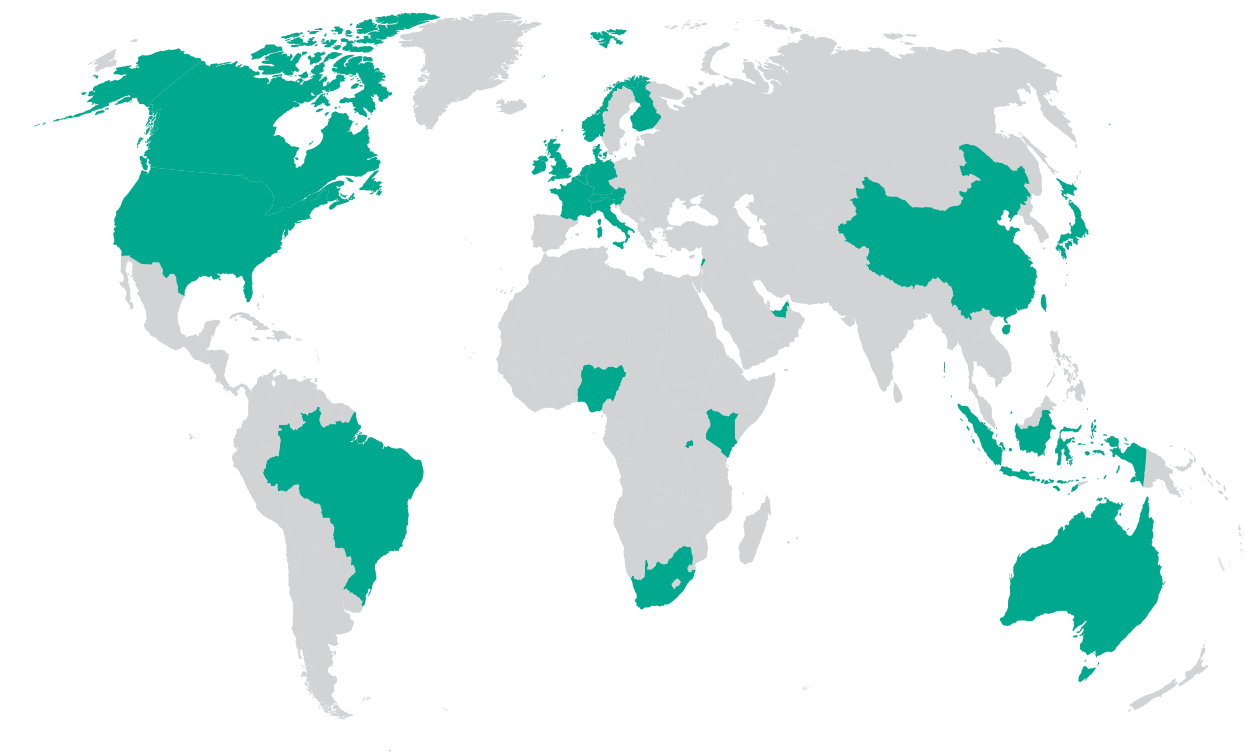
► **Transformation** – We believe in urgent action, a results orientation, innovation, and the necessity of transformation in the world, the PACE community, and our respective organizations.

► **Inclusion** – We know that solving the world's most complex problems requires embracing differences, actively including a variety of voices in our decision-making and actions, and respecting the equal value of every human being.



Global Reach Map

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| COMPANY | | |
|----------------------------------|--|---------------------|
| Kees van Dijkhuizen | <i>Chairman and CEO</i> | ABN AMRO Bank |
| Peter Lacy | <i>Senior Managing Director</i> | Accenture Strategy |
| Larry Page | <i>Co-Founder and CEO</i> | Alphabet |
| Lisa P. Jackson | <i>VP, Environment, Policy and Social Initiatives</i> | Apple |
| Alan Knight | <i>General Manager, Corporate Responsibility</i> | ArcelorMittal |
| Gregory Hodkinson | <i>Chairman</i> | Arup Group |
| Matthew Toy | <i>Water International Client Director</i> | Atkins |
| Malek Sukkar | <i>CEO</i> | Averda |
| Mikela Druckman | <i>Founder and CEO</i> | Grey Parrot |
| Privahini Bradoo | <i>Founder and CEO</i> | BlueOak Resources |
| Chuck Robins | <i>Chairman and CEO</i> | Cisco Systems |
| Michael S Dell | <i>Chairman and CEO</i> | Dell Technologies |
| Bill Stephenson | <i>Chairman and CEO</i> | DLL Group |
| Monica Spada | <i>Senior VP, Bio Development, Sustainable Mobility and Circular Economy</i> | Eni |
| Xu Kaihua | <i>Chairman</i> | GEM |
| Leontino Balbo Jr. | <i>Agriculture Director</i> | Grupo Balbo |
| Thierry Bolloré | <i>CEO</i> | Groupe Renault |
| Enrique Lores | <i>President and CEO</i> | HP |
| Holy Ranaivozanany | <i>Head, Corporate Social Responsibility</i> | Huawei Technologies |
| Ralph Hamers | <i>CEO</i> | ING Group |
| Jesper Brodin | <i>President and CEO</i> | Ingka Group |
| Carlo Messina | <i>CEO</i> | Intesa Sanpaolo |
| Stefan Doboczky | <i>CEO</i> | Lenzing Group |
| Arthur Huang | <i>Co-Founder and CEO</i> | Miniwiz |
| Takehiko Kakiuchi | <i>CEO</i> | Mitsubishi Motors |
| Hiroto Saikawa | <i>CEO</i> | Nissan |
| Lars Fruergaard Jorgensen | <i>President and CEO</i> | Novo Nordisk |
| David S Taylor | <i>Chairman, President and CEO</i> | Procter & Gamble |
| Steve Schmida | <i>Co-founder & Chief Innovation Officer</i> | Resonance |

| | | |
|-------------------------------|--|-----------------------|
| Jean-Sébastien Jacques | <i>CEO</i> | Rio Tinto |
| Nitesh Magdani | <i>Group Director, Sustainability</i> | Royal BAM Group |
| Feike Sijbesma | <i>Chairman and CEO</i> | Royal DSM |
| Frans van Houten | <i>CEO</i> | Royal Philips |
| Pascal Juéry | <i>Member of the Executive Committee</i> | Solvay |
| Bertrand Camus | <i>CEO</i> | SUEZ |
| Christian Wessels | <i>Co-Founder</i> | Sunray Ventures |
| Tom Szaky | <i>Founder and CEO</i> | TerraCycle |
| James Quincey | <i>Chairman and CEO</i> | The Coca-Cola Company |
| Gonzalo Muñoz | <i>Co-Founder and CEO</i> | TriCiclos |
| Alan Jope | <i>CEO</i> | Unilever |
| Antoine Frérot | <i>Chairman and CEO</i> | Veolia |
| Svein Tore Holsether | <i>President and CEO</i> | Yara International |

GOVERNMENT

| | | |
|-------------------------------|---|--|
| Li Yonghong | <i>Assistant Secretary-General</i> | China Council for International Cooperation on Environment and Development |
| Luhut B. Pandjaitan | <i>Coordinating Minister for Maritime Affairs</i> | Coordinating Ministry for Maritime Affairs Indonesia |
| Barbara Creecy | <i>Minister of Forestry and Fisheries and Environmental Affairs</i> | Ministry of Environment, Forestry and Fisheries South Africa |
| Jyrki Katainen | <i>VP for Jobs, Growth, Investment and Competitiveness</i> | European Commission |
| Werner Hoyer | <i>President</i> | European Investment Bank |
| Suleiman Hassan | <i>Minister of State for the Environment</i> | Federal Ministry of Environment Nigeria |
| Lea Wermelin | <i>Minister for Environment</i> | Ministry of Environment and Food Denmark |
| Thani Ahmed Al Zeyoudi | <i>Minister of Climate Change and Environment</i> | Ministry of Climate Change and Environment United Arab Emirates |
| Miro Cerar | <i>Minister of Foreign Affairs</i> | Ministry of Foreign Affairs Slovenia |

| | | |
|-------------------------------|---|---|
| Stientje van Veldhoven | <i>Minister for the Environment and Housing</i> | Ministry of the Environment and Housing the Netherlands |
| Shinjirō Koizumi | <i>Minister of the Environment</i> | Ministry of the Environment Japan |
| ORGANIZATION | | |
| Zhao Kai | <i>VP and Secretary-General</i> | China Association of Circular Economy |
| Yu Keli | <i>Secretary General, Electronic Products Recycling Division</i> | China National Resources Recycling Association |
| Harald Friedl | <i>CEO</i> | Circle Economy |
| Dame Ellen MacArthur | <i>Founder & Chair of the Trustees</i> | Ellen MacArthur Foundation |
| Naoki Ishii | <i>Chairperson and CEO</i> | Global Environment Facility |
| Alfredo Giró Quincke | <i>Institutional Engagement, IDB Lab</i> | Inter-American Development Bank |
| Jane McDonald | <i>Interim President and CEO</i> | International Institute for Sustainable Development |
| Guy Ryder | <i>Director-General</i> | International Labour Organization |
| Izabella Teixeira | <i>Co-Chair</i> | International Resource Panel |
| Janez Potocnik | <i>Co-Chair</i> | International Resource Panel |
| Janis Jones | <i>CEO</i> | Ocean Conservancy |
| William McDonough | <i>Adjunct Professor, Department of Civil and Environmental Engineering</i> | Stanford University |
| Wen Zongguo | <i>Professor, School of Environment</i> | Tsinghua University |
| Inger Andersen | <i>Executive Director</i> | United Nations Environment Programme |
| Laura Tuck | <i>VP for Sustainable Development</i> | World Bank Group |
| Peter Bakker | <i>President and CEO</i> | World Business Council for Sustainable Development |
| Dominic Waughray | <i>Managing Director</i> | World Economic Forum |
| Andrew Steer | <i>President and CEO</i> | World Resources Institute |
| Marco Lambertini | <i>Director-General</i> | World Wide Fund for Nature |



WORLD
RESOURCES
INSTITUTE

accenturestrategy





Photo by Peter Feghali on Unsplash

PACE accelerates the transition to a global circular economy through three activity pillars: Leadership, Learning and Projects. The pillars closely interact with one another to implement PACE's strategy.

Leadership

Leadership is critical for PACE's theory of change and value proposition, driving the development and scaling of projects. PACE curates and strategically engages an active network of early adopter CEOs of global companies, ministers of governments and leaders of other global organizations in civil society and multilateral institutions. These leaders champion the circular movement by sharing best practices and PACE learning, inform the global transition agenda and lead the way through adoption of practices within their respective organizations and networks. By activating global leaders, PACE ensures that on-the-ground delivery informs adoption at the highest levels of global leadership.

Learning

Activities under the Learning pillar manage knowledge generated from projects, partners and the Secretariat to inform action and better enable scaling of circular solutions. This involves consolidating a learning agenda across the PACE Community through mapping exercises within PACE's Thematic Areas and Systems Initiatives, facilitating targeted cross-learning between PACE projects and across the PACE Community, and disseminating learnings to leadership and relevant stakeholders to drive scale.

Projects

PACE enables a project portfolio within its Thematic Areas and Systemic Initiatives, in alignment with its vision, mission and values. The PACE Community functions as a project incubator and catalyst. The PACE Secretariat coordinates the portfolio, monitors and supports Affiliate projects, and initiates and drives Secretariat-led projects on selected matters, while also extracting scalable learnings from those projects.



Highlights 2019

New Board members on board

PACE warmly welcomes Ms. Stientje van Veldhoven (Minister for the Environment and Housing, Government of the Netherlands), Dame Ellen MacArthur (Founder and Chair of the Trustees, Ellen MacArthur Foundation) and Ms. Inger Andersen (Executive Director, UN Environment Programme) on the Board of Directors.

Secretariat moved to The Hague

The PACE Secretariat officially transitioned from the World Economic Forum to be hosted by the World Resources Institute in The Hague. Its core staffing was in place by September, and the team is now up and running at full speed. The World Economic Forum remains one of PACE's closest partners, serving in the Leadership Group and Board of Directors.

Project achievements

Five new PACE projects were launched in 2019, bringing the total number of projects in the portfolio to 18. Eight new reports were published, and PACE activities expanded into new geographical regions including Southeast Asia, Latin America, North America and the Middle East.

Growing community

The PACE Leadership Group grew from around 50 to over 70 in 2019. The broader PACE Community now has over 200 members. The expansion came

from many sectors, including banking, food and beverage, automotive, technology, construction, pharmaceuticals, international development and research institutions, as well as governments such as the UK, Germany and South Africa.

Dissemination in international events

PACE has been at the forefront of several high-impact global events, including the World Economic Forum's Annual Meeting 2019, the G20, Responsible Business Forum and the Sustainable Development Impact Summit during UN Climate Week. Many members of the PACE Leadership Group delivered speeches at the World Circular Economy Forum in Helsinki, which is an anchor event in PACE's annual calendar.

Priorities in 2020

- ▶ Activate more global champions for circularity through targeted outreach and focused engagements informed by new PACE Community learnings
- ▶ Grow PACE's curated portfolio of projects based on Thematic Area recommendations and more active leadership in Systemic Initiatives
- ▶ Scale up PACE engagement plans for accelerated industry, material and issue-based collaboration
- ▶ Roll out improved impact-focused learning systems to ensure the appropriate evidence is developed to influence the adoption of best practices in circularity
- ▶ Launch a three-year strategic plan to scale PACE's global impact



Global Challenges



The linearity in our economy has led to significant societal challenges worldwide, such as resource depletion, climate change, waste, pollution and health hazards. PACE currently engages in circular economy transitions across four Thematic Areas with very high ecological footprints, being Electronics & Capital Equipment, Plastics, Food & Agriculture, Textiles & Fashion. PACE also works on cross-cutting systems issues that can unlock scale in various industries, including metrics, business models, innovation and regional networks.

Electronics & Capital Equipment

This thematic area covers a broad range of consumer and industrial products, from smart phones to medical imaging equipment - anything with a plug, electric cord or battery. As their use has surged, thanks to rapid innovation and lowering costs, electronics have become the world's fastest-growing waste stream, and a very valuable one. It is estimated to have reached 50 million metric tons in 2018 and worth at least 60 billion USD.¹ This figure is expected to double by 2050.² Only 20% of global e-waste is recycled through appropriate channels.¹ The remainder largely ends up in landfills or illegal exports to Africa, Asia and South America for informal processing, causing severe environmental and health hazards and the loss of valuable materials.

Beyond end-of-life management challenges, the production phase of these industries has a significant greenhouse gas emission and raw material consumption footprint. Capital equipment, for instance, accounts for 57% of all metal ores

consumed globally.³ Complex electronics such as smart phones use up to 60 elements from the periodic table,¹ many of which are either of limited supply or create serious pollution and environmental externalities when mined (such as rare earth metals).

Circular strategies could provide solutions to both upstream and end-of-life challenges in these sectors. It is time to reconsider e-waste, re-evaluate the electronics industry and reboot the system for the benefit of industry, consumer, worker, health of humankind and the environment.² PACE currently has a portfolio of five projects in Electronics & Capital Equipment, involving over 70 leading organizations from both the public and private sectors. The projects address different elements required for the systemic change. These include forging a common circular vision, implementing policy and financing schemes at the national level for reverse logistics and recycling, incorporating recycled materials back into the economy, and developing business models that enable product lifetime extension.

Projects

New Vision for Electronics

Align the relevant UN entities, key governments and large electronics multi-nationals around a common plan for the future of the electronics sector, based on the principles of the circular economy.

PARTNERS: World Economic Forum, ILO, ITU, UNEP, UNIDO, UNitar, United Nations University, WBCSD

LOCATION: Global

China Secondary Material Flows

Support effective systems for the integration of recycled materials into electronic products and equipment along with other circular economy strategies in China.

PARTNERS: World Economic Forum, Philips, Dell, HP, Tsinghua University, GEM, CRRA, China Association of Circular Economy

LOCATION: China

Circular Economy Approaches for Electronics in Nigeria

Kickstart a financially self-sustaining circular economy approach for the electronics sector in Nigeria, including implementation of Extended Producer Responsibility policy, establishment of a Producer Responsibility Organization, collection and recycling pilots, and best practices along the electronics value chain for Africa.

PARTNERS: UNEP, NESREA, EPRON, Hinckley, UNU, GEF, with support from Philips, Dell, HP, Microsoft, World Economic Forum

LOCATION: Nigeria (pan-African engagement and dissemination)



- ▶ Report “A New Circular Vision for Electronics” launched and the UN e-waste coalition expanded in 10 agencies.
- ▶ Completed baseline study with recommendations for China central government on circular electronics.
- ▶ Project launch - Circular Economy Approaches for Electronics in Nigeria.
- ▶ Report “A Vision for a Sustainable Battery Value Chain in 2030” published; Guiding value chain principles agreed at the GBA General Assembly.
- ▶ Expansion in sectors (adding energy equipment) as well as geographies (adding North America) of the Capital Equipment Coalition project.

Global Battery Alliance

Catalyze and accelerate action through a global collaboration platform towards a socially responsible, environmentally sustainable and innovative battery value chain to power the Fourth Industrial Revolution.

PARTNERS: World Economic Forum, African Development Bank Group, Amara Raja Group, Audi, BASF, Cadenza Innovation, China Chamber of Commerce of Metals, Minerals and Chemicals Importers and Exporters, ClimateWorks Foundation, GIZ, Enel, Envision Group, ERG, Everledger, Fairphone, Good Shepherd International Foundation, Google, Honda, Huayou Cobalt, International Energy Agency, IJM, Johnson Controls, Mitsubishi Corporation, NPL, NEC, OECD, Pact, Pure Earth, RCS Global, RESOLVE, Responsible Battery Coalition, Responsible Business Alliance, Royal DSM, Saft, SAP, Signify, Stanley Black & Decker, Stern School of Business, New York University, Trafigura Group, T&E, Umicore, UNICEF, UNEP, Volkswagen Group, Volvo Group, White & Case, World Bank

LOCATION: Global

Capital Equipment Coalition

Capital equipment manufacturers share progress and insights on replicable practices towards their pledges on value preservation and recovery from their products.

PARTNERS: Philips, ASML, Cisco, Damen, Dell, KPN, Lely, Vanderlande, Enel, Circle Economy, (US Chamber of Commerce Foundation in North America)

LOCATION: Europe (expanding to North America)

Plastics

Plastics are an integral and important part of the global economy. Global plastics production has surged since the 1960s, reaching almost 350 million metric tons in 2017.⁴ By 2050, plastic production is expected to account for 20% of total oil consumption and 15% of the global annual carbon budget.⁵

One urgent issue in this sector is plastic packaging, which accounts for 26% of the total plastics market.⁵ Although it brings significant benefits, most is thrown away after single use. Only 14% of that waste is collected for recycling.⁵ One-third of all plastic packaging waste leaks into the environment, contributing to issues such as the estimated 150 million metric tons of plastic that circulates in our ocean today.⁶ The cost of such after-use externalities, plus the cost associated with greenhouse gas

emissions from its production, is conservatively estimated at USD 40 billion annually. This figure is larger than the plastic packaging industry's profit pool.⁵

The magnitude and urgency of the plastic issue have sparked global action in NGOs, companies and governments. Over 400 organizations, including 200 companies, have signed the New Plastics Economy Global Commitment to a vision for a world where plastic never becomes waste.⁷ More than 60 countries have introduced bans and levies to curb single-use plastic waste.⁸ PACE currently has a portfolio of four projects in plastics, tackling the challenge from multiple angles. These include building a circular vision, nudging consumer behavior, guiding policies and reducing leakages into the ocean.

The New Plastics Economy

Bring together key stakeholders to rethink and redesign the future of plastics, by applying the principles of the circular economy, starting with packaging. In a new plastics economy, plastic never becomes waste or pollution.

PARTNERS: Ellen MacArthur Foundation, Wendy Schmidt, Global Environment Facility, Oak Foundation, Amcor, Borealis, The Coca-Cola Company, Danone, L'Oreal, MARS, Nestlé, PepsiCo, Unilever, Veolia, Walmart

LOCATION: Global

Global Plastic Action Partnership

A public-private platform to translate political commitments to address plastic waste and pollution into tangible action by accelerating and scaling circular economy solutions across sectors.

PARTNERS: World Economic Forum, UK Defra, The Coca-Cola Company, PepsiCo, Government of Canada, Dow, Nestlé

LOCATION: Global (with national programs currently in Indonesia and Ghana)



- ▶ Over 400 organizations have signed the New Plastics Economy Global Commitment, including nearly 200 businesses.
- ▶ New Plastics Economy launched “Reuse: Rethinking Packaging” book.
- ▶ France and Chile joined the UK in the New Plastics Economy’s Plastics Pact network.
- ▶ National Plastic Action Partnership launched in Indonesia and Ghana.
- ▶ Consumers Beyond Disposability platform launched with on-the-ground action in Paris and New York, with more cities next in line.
- ▶ “Plastics Policy Playbook - Strategies for a Plastic-Free Ocean” launched.

Consumers Beyond Disposability

Catalyze large-scale adoption of new waste reduction solutions such as Loop, which seeks to shift consumer consumption from disposable to durable packaging solutions.

PARTNERS: World Economic Forum, Ellen MacArthur Foundation, City of Paris, NYC Mayor’s Office of Sustainability, PepsiCo, P&G, TerraCycle, Greenpeace, WWF, UNEP

LOCATION: Currently United States and France

Collect to Protect

Improve collection and end marine plastics by innovating public/private policy measures for government and business.

PARTNERS: Ocean Conservancy, Accenture

LOCATION: Global

Food & Agriculture

Food is at the heart of human existence, culture and economy. While massive advances have been made in the productivity of the modern food industry, the current system cannot meet our future needs sustainably. The world is in the current paradox of wasting one-third of all food produced, while more than 800 million people are hungry or malnourished.⁹ Overall, for every dollar spent on food, society pays two dollars in health, environmental, and economic costs.¹³

Food production, and in particular the farming stage, is resource-intensive, wasteful and polluting. It occupies (and depletes) 87% of the world's land for agriculture,¹⁰ and is the most significant driver of global deforestation.¹¹ It drives 90 to 95% of global scarcity-weighted water use and accounts for 26% of anthropogenic greenhouse gas emissions.¹⁰ The agrifood industry depends on extracting vast amounts

of finite resources. Yet their use is highly wasteful: about 70% of mined phosphorous is lost during food production,¹² and less than 2% of the nutrients in food waste and human waste is looped back into the system.¹³ Poor agriculture practices, such as untreated manure and excessive use of fertilizers and pesticides, are a leading contributor to air pollution, water contamination and other health hazards.

Global food demand is projected to increase by more than 50% in 2050,¹⁴ driven by population and income growth. In order to meet this extra demand while keeping the food system within planetary boundaries, we need to significantly reduce food waste, improve farming practices and technologies and shift our diets. PACE aims to grow its project portfolio in this thematic area and contribute effectively to the solution of this complex challenge.

Projects

Ellen MacArthur Foundation Food Initiative

Over the next three years, the initiative will bring together key actors to stimulate a global shift towards a regenerative food system, focusing on the actions cities can take based on circular economy principles..

PARTNERS: This Ellen MacArthur Foundation initiative is supported by Wendy Schmidt (Lead Philanthropic Partner) GEF & Oak Foundation (Philanthropic Funders) and Amcor, Borealis, The Coca-Cola Company, Danone, L'Oréal, MARS, Nestlé, PepsiCo, Unilever, Veolia and Walmart (Core Partners).

LOCATION: Global (with program activities currently in the UK, US, Brazil and China)

"10x20x30" Food Loss and Waste Initiative

Bring together 10 of the world's biggest food retailers and providers to each engage with 20 of their priority suppliers to halve rates of food loss and waste by 2030.

PARTNERS: World Resources Institute, AEON, Ahold Delhaize, Carrefour, IKEA Food, Kroger, METRO AG, Pick n Pay, The Savola Group, Sodexo, Tesco, Walmart

LOCATION: Global

Key Outcomes

- ▶ The Food initiative launched at the EAT Forum. Consortia of relevant stakeholders have been convened in London and São Paulo.
- ▶ Major food retailers and providers, with operations in over 80 countries combined, joined new "10x20x30" Initiative.



Textiles & Fashion

Globally, textiles and fashion is a USD 1.3 trillion industry, employing more than 300 million people along the value chain.¹⁵ It is also one of the most resource-intensive, wasteful and polluting industries. Cotton cultivation accounts for 16% of all pesticide use,¹⁶ and a significant water footprint (on average it takes 10,000 liters to produce 1 kg of cotton).¹⁷ One quarter of all plastics produced are used for synthetic textile fibers, which are in turn a major source of ocean microplastics when they break down during washing. Textile production also uses large amounts of chemicals, such as pesticides and dyes. This results in 20% of industrial wastewater pollution worldwide,¹⁸ and health hazards to the workers and wearers.

Clothing represents 60% of all textile applications. Driven by a growing middle-class population and the “fast fashion” phenomenon, clothing production and consumption has doubled over the past 15 years, while the average times a new garment is worn has decreased by 36% over the same period.¹⁵ Three-quarters of the world’s textile waste is destined for incineration or landfill.¹⁵ Among the

13% collected for recycling, most is downcycled into low-value applications.¹⁵ Both the production and use (washing/drying/ironing) phases of the textile industry have significant carbon footprint, emitting more greenhouse gas than those of all international flights and maritime shipping combined.¹⁵

This linear system needs disruption. The movement to a circular textiles & fashion system has begun. The Higg Index, a standardized suite of tools developed by The Sustainable Apparel Coalition, is used to measure environmental and social impacts across the value chain.¹⁹ 90 companies, representing 12.5% of the global fashion market, have signed ‘The 2020 Circular Fashion System Commitment’, initiated by Global Fashion Agenda.²⁰ The Fashion Pact, launched before G7 in 2019, brings together leading global fashion and textile companies (representing over 150 brands) to reduce the environmental impact of the industry. Fashion for Good, an innovation platform, sparks and invests in new technologies and business models that have the potential to transform the industry.

PACE has added Textiles & Fashion in 2019 as its newest Thematic Area and expects to announce new projects and partners in early 2020.

System Initiatives

In addition to the Thematic Areas, PACE hosts projects that address cross-cutting systems issues that can unlock scale in various industries, with a current attention to metrics, business models and innovation. PACE also hosts projects that build regional leadership networks to advance transition to a circular economy in different parts of the world.

Metrics

An increasing number of businesses and governments develop targets, strategies, national roadmaps and policies to advance the circular economy. Metrics are essential to define and measure progress, as well as the environmental, social and economic outcomes of a circular economy.

Circular Economy Indicators Alliance

Convenes key stakeholders and advance harmonized approaches to measuring the progress and impacts of a circular economy transition.

PARTNERS: PACE (Secretariat), World Resources Institute, World Economic Forum, Circle Economy

LOCATION: Global

Circularity Gap Report

The Circularity Gap Report provides a metric that measures the circular state of the world economy and high-level insights into the global metabolism. It also identifies key levers for transitioning to circularity at a global level by mid-21st century.

PARTNERS: Circle Economy, WBCSD, DSM, UNCTAD, City of Amsterdam, WWF, Philips

LOCATION: Global and national (Austria as the first country)

Business Models

Circular economy requires rethinking business models, including creating market appetite for circular products, collaboration and incentive alignment across the supply chains, as well as new financing models and revenue streams.

Circular Procurement

Aims to incorporate circularity requirements in sustainable procurement practices for governments and businesses, to create market pull to scale supply chain circularity.

PARTNERS: UNEP, Government of the Netherlands, Government of China

LOCATION: Global

Circular Supply Chain Accelerator

Aims to foster effective supply chain collaboration and create viable, bankable business cases for their circular propositions. Its initial focus is on construction and infrastructure.

PARTNERS: ING, Accenture, Circle Economy

LOCATION: Global

Innovation

Digital, physical and biological technology innovations are disrupting society at unprecedented speed and scale. If well harnessed, they have enormous potential in facilitating the transition towards a circular economy.

Scale 360 (4IR for Circular Economy)

SCALE 360 is a global partnership that seeks to fast-track fourth industrial revolution technology innovations for the circular economy. It will do this by creating a global network of nationally-led innovation challenges, surfacing, supporting and connecting innovators working on circular solutions for plastics, electronics, fashion and food.

PARTNERS: World Economic Forum, Government of UAE, Government of Chile, SOFOFA, IDEO, Google

LOCATION: Global – with initial national chapters in the UAE and Chile (2020)

Regional Networks

PACE builds regional networks of early adoption leaders of circular economy to catalyze the transition globally, as well as to stimulate dialogues between different regions on the global aspects of circular economy.

The African Circular Economy Alliance

Serves as a platform for its members to support the transition to a circular economy at the national, regional and continental levels.

MEMBERS: Government of Nigeria, Government of Rwanda, Government of South Africa, Government of Cameroon.

STRATEGIC PARTNERS: World Economic Forum, African Development Bank, GEF, ADEID, UNEP, Ministry of Environment Finland

LOCATION: Pan-Africa

The Latin-American & Caribbean Circular Economy Coalition

Creates a common regional vision and platform for advancing and building circularity in their economies (under development).

PARTNERS: UNEP, World Economic Forum, UNIDO, Konrad Adenauer Foundation (KAS-EKLA)

LOCATION: Central and South America

- ▶ Report “Harnessing the 4th industrial revolution for the circular economy” launched.
- ▶ Report “Show me the value” launched.
- ▶ Circularity Gap Report Austria launched.
- ▶ Circularity Measurement landscape overview completed.
- ▶ Global Circularity Gap Report 2020 to be launched soon.
- ▶ UAE first globally to sign on WEF’s ‘Scale 360’ initiative.
- ▶ African Circular Economy Alliance charter signed.

Thank Our Donors

We value all our donors and are very proud to recognize the diverse group of supporters who share our commitment to accelerate towards a global economic system that concurrently enables human and environmental well-being.

The list below includes donors contributing to core funding, while our acknowledgment extends to all donors supporting project activities.



Governments

- ▶ Ministry of Infrastructure and Water Management of the Netherlands
- ▶ Ministry for Economic Cooperation and Development of Germany
- ▶ Department for Environment, Food & Rural Affairs of the United Kingdom
- ▶ Ministry of the Environment of Japan
- ▶ Danish International Development Agency
- ▶ Department of the Environment of Canada
- ▶ Municipality of the Hague

Foundations

- ▶ Goldschmeding Foundation
- ▶ Sitra

Corporates

- ▶ Unilever
- ▶ Heineken
- ▶ DSM
- ▶ Royal Philips
- ▶ Friesland Campina
- ▶ Royal Shell
- ▶ Rabobank

In-kind contributions

- ▶ Accenture Strategy
- ▶ World Economic Forum
- ▶ Resonance

DONOR PROFILE:

The Ministry of Infrastructure and Water Management of the Netherlands is aiming for a fully circular economy in the Netherlands in 2050, and - as a stepping stone - have the use of raw materials halved by 2030. By supporting PACE, the Ministry is able to share learnings and tap into experiences in other countries and businesses. A circular economy is a global economy, and by joining PACE the scale of impact is increased and has the potential to accelerate the global transition.

DONOR PROFILE:

The Department for Environment, Food and Rural Affairs of the United Kingdom and the Department of the Environment of Canada co-financed investments in tackling global plastic waste by establishing the Global Plastic Action Partnership, hosted by the World Economic Forum. The funder identified that as a critical element to reach on the ground action and global scale, action need to be combined with enabling global policy. They have partnered with PACE to influence global policy and practice and to amplify learnings.

SPECIAL THANKS

We would like to recognize Jan Peter Balkenende, Former Prime Minister of the Netherlands, for his on-going support and contribution to launching the PACE Secretariat in the Netherlands.

BOARD OF DIRECTORS

PACE's Board of Directors is comprised of a diverse and distinguished group of corporate, government and civil society leaders. The Board actively shapes PACE's priorities to progress the circular economy and provide oversight and guidance on the development and delivery of PACE's strategic plan.

- ▶ Frans van Houten (Co-chair)*
CEO, Royal Philips
- ▶ Naoko Ishii (Co-chair)*
Chairperson and CEO, Global Environment Facility
- ▶ Andrew Steer*
President and CEO, World Resources Institute
- ▶ Dominic Waughray*
Managing Director, Centre for Global Public Goods, World Economic Forum
- ▶ Stientje van Veldhoven
Minister for the Environment and Housing, Government of the Netherlands
- ▶ Dame Ellen MacArthur
Founder and Chair of the Trustees
Ellen MacArthur Foundation
- ▶ Inger Anderson
Executive Director, UN Environment Programme
- ▶ Peter Lacy (ex-officio, Strategic Advisor to the Board)
Senior Managing Director UK & Ireland, Accenture Strategy
- ▶ David B. McGinty (ex-officio)
Global Director, PACE

**Executive Committee Member*

MANAGEMENT ADVISORY COMMITTEE

PACE's Management Advisory Committee is available to the PACE Secretariat for day-to-day support in the delivery of PACE Community's agenda.

- ▶ Harald Tepper
Program Lead Circular Economy, Royal Philips
- ▶ Leah Bunce Karrer
Senior Program Officer, Global Environment Facility
- ▶ Kevin Moss
Global Director Business Center, World Resources Institute
- ▶ Antonia Gawel
Head Circular Economy, World Economic Forum
- ▶ Quentin Drewell
Strategy Principal & UK Circular Economy Lead, Accenture Strategy
- ▶ Janneke de Vries
Director European Partnerships, World Resources Institute

In addition, special thanks to the other delegates of the Board of Directors: Dorine Wytema (Ministry of Infrastructure & Water Management of NL), Elisa Tonda (UN Environment Programme), and Jocelyn Bleriot (Ellen MacArthur Foundation).

SECRETARIAT

The PACE Secretariat orchestrates PACE's governing bodies, funding and the overall delivery of the PACE Community's plans in line with PACE's Vision, Mission and Values.

- ▶ David B. McGinty, Global Director
- ▶ Ke Wang, Knowledge Lead
- ▶ Krista Kruft, Engagement Lead
- ▶ Lotte Holvast, Program Coordinator
- ▶ Nicholas Walton, Communication Advisor
- ▶ Loek Custers, Project Lead
(seconded from Accenture Strategy)
- ▶ James Pennington, Project Lead (seconded from the World Economic Forum)
- ▶ Joshua Curtis (seconded from Accenture Strategy)
- ▶ Seth Olson (seconded from Resonance)
- ▶ Anne Duijvesteijn, Intern
- ▶ Sara Yrjömäki, Intern

In addition, recognizing specific contributions in helping to establish the Secretariat in 2019:

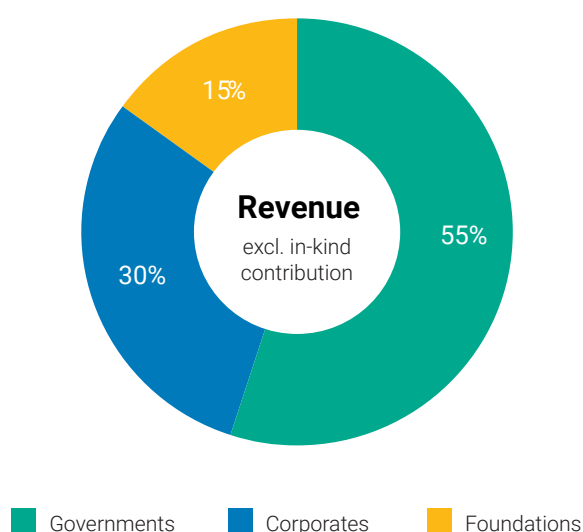
Jurriaan Coomans (Accenture), Suzanne Hazelzet (Accenture), Tessa van Soest (Accenture), Tamara Veldboer (Circle Economy), Marc de Wit (Circle Economy), Ladeja Godina Košir (Circular Change), Renilde Becque (Consultant), Mathy Stanislaus (Global Battery Alliance), Leah Canning (Canadian Government), Hilary Geller (Canadian Government), Guus Kramer (Maatschappelijke Alliantie), Victorine van Huet (Philips), Robert Metzke (Philips), Steve Schmida (Resonance), Kari Herlevi (Sitra), Mika Sulkinoja (Sitra), Julia Okatz (SYSTEMIQ), Martin Stuchtey (SYSTEMIQ), Claire Thiebault (UNEP), Ligia Noronha (UNEP), Kija Kummer Brown (World Economic Forum), Chelsea Babcock (World Resources Institute), Henrieke Jonker (World Resources Institute), Alberto Pallecchi (World Resources Institute), Christy Pak (World Resources Institute), Tadeo Thornburn (World Resources Institute) and WRI Europe team.

We are grateful to our donors for supporting the PACE Secretariat. PACE's Board of Directors ensures PACE effectively manages its resources and continued growth, in combination with WRI's Board Committee for Audit and Risk Management. Charity navigator and WRI's auditors certify that WRI (and, inter alia, PACE) is allocating the right amount of resources for compliance activities.

PACE and WRI strive for operational excellence across our global network starting with the recruitment, retention and management of PACE and WRI's staff. PACE and WRI maintain strict financial controls to ensure that all contributions are managed in compliance with donor's wishes. Accordingly, WRI has received the following recognition:



In 2019, PACE is supported by donors representing a balanced group of sectors and industries:



In 2019 PACE made the following investments in ensuring that we are equipped to achieve our mission:

- ▶ PACE has transitioned successfully from the World Economic Forum to the World Resources Institute
- ▶ Recruited and mobilized core Secretariat staffing while maintaining all existing partner relationships
- ▶ Established internal operating procedures and reporting mechanisms
- ▶ Transitioned all operational functions, including finance, human resources and communications functions
- ▶ Built an inaugural Board of Directors with clear roles, responsibilities and agendas
- ▶ Began brokering a three-year strategic plan with insights from the PACE Community and relevant external stakeholders
- ▶ Clarified fundraising need and processes
- ▶ Launched the new website: www.pacecircular.org

ENDNOTES

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PACE facilitates public-private collaboration, learning, and action to accelerate a transition to a circular economy at global level. Join us in each step towards driving impact.

EXPLORE AND CONNECT

Connect with PACE on social media and follow our actions and insights on the global transition to a circular economy using the power of public-private collaboration. PACE's website offers free resources on projects and knowledge products, implemented and published by PACE's partners. Explore innovative solutions that unlock the greatest circular economy opportunities and establish an evidence base that can inform bolder actions by global leaders in the PACE community. Find an overview at pacecircular.org/projects and pacecircular.org/resources.

JOIN AND SHARE

PACE offers an opportunity to organizations with an agenda on the circular economy to connect to a community of peers, experts, and leaders who move first and fast in the adoption of circular change. Members of the PACE community access updates and best practices from projects as well as insights into the circular economy landscape through knowledge products, quarterly PACE Community Calls and the PACE Newsletter. If you are interested in joining and sharing, go to pacecircular.org/contact.

PACE hosts a select group of projects and leaders that drive impact and evidence for a circular economy. PACE's project partners benefit from specialized learning calls (invitation only). The Leadership Group accesses practical and scientifically based evidence, recommendations for action and opportunities to make a change as a champion for circular change. Project affiliation and membership of the Leadership Group is by invitation only. If you are interested to engage with PACE at this level, please contact us at pacecircular.org/contact.

DONATE

We welcome support from governments, foundations, companies and organizations that wish to contribute to accelerating the transition towards a global circular economy. To learn more or to make a donation, please contact Lotte Holvast at lotte.holvast@wri.org.



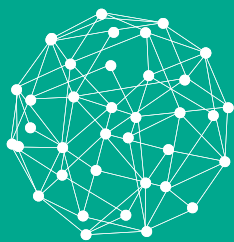
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