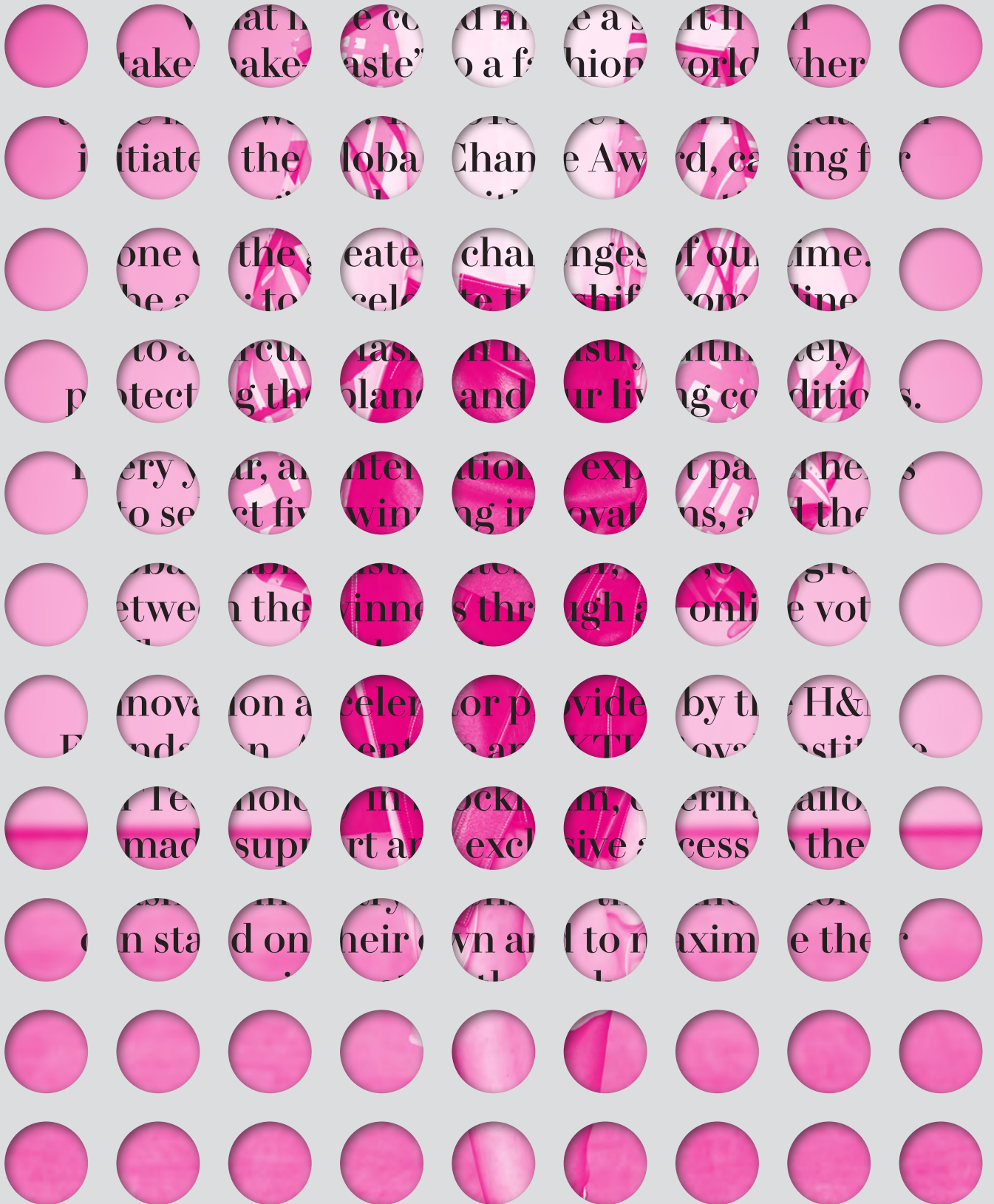
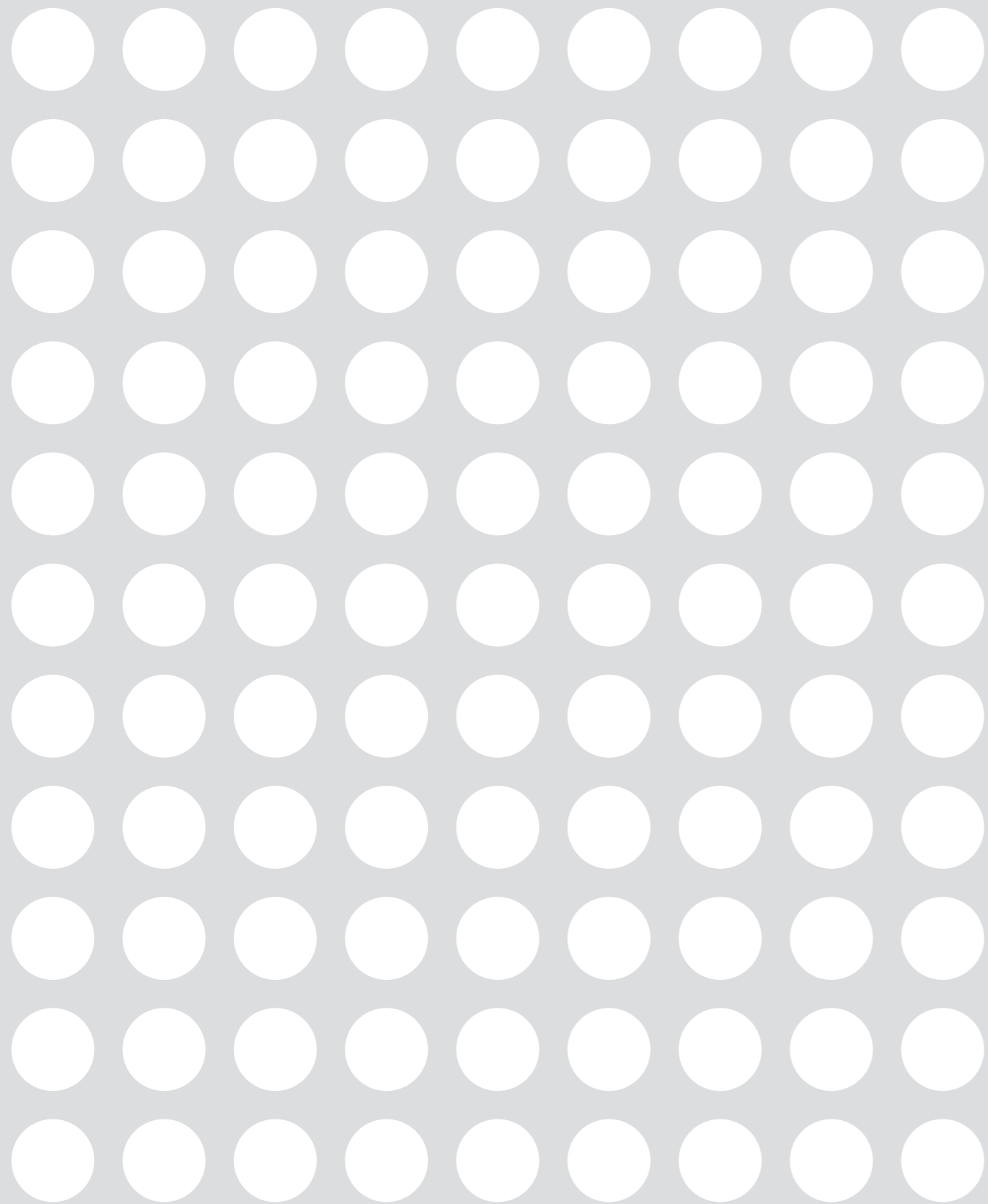




Global Change Award

AN INNOVATION CHALLENGE
BY H&M FOUNDATION





Laying the ground for future heroes

What if we could make a shift from “take-make-waste” to a fashion world where there is no waste? In 2015, the H&M Foundation initiated the Global Change Award, calling for game-changing ideas with the potential to solve one of the greatest challenges of our time. The aim: to accelerate the shift from a linear to a circular fashion industry, ultimately protecting the planet and our living conditions.

Every year, an international expert panel helps to select five winning innovations, and the global public distributes a €1,000,000 grant between the winners through an online vote.

The winners also gain access to a one-year innovation accelerator provided by the H&M Foundation, Accenture and KTH Royal Institute of Technology in Stockholm, offering tailor-made support and exclusive access to the fashion industry to ensure the innovations can stand on their own and to maximize their impact on the industry.

Are you a future hero?

Apply between September 13 and October 31
globalchangeaward.com

The Global Change Award is one of the world's biggest challenges for early stage innovation, and the first of its kind for the fashion industry.

Along with a shared grant of €1 million, the five winners are provided a one-year accelerator.

The H&M Foundation takes no equity or IP rights for the applied innovations.

This year, we are looking for five new radical ideas within the following areas:

Digitalization—digital technologies in production, retail, consumer's life and product's end of life.

Waste—textile materials made of waste from other industries and textile waste, eliminating or recycling processes and technologies.

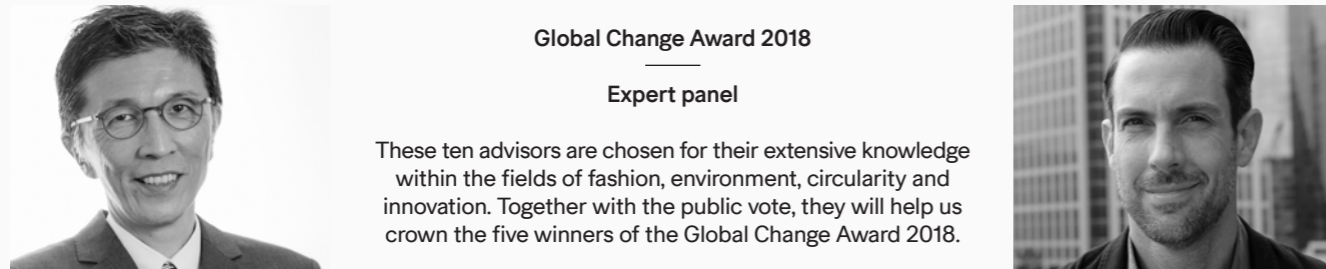
Climate positive—materials and processes which are not only climate neutral but climate positive by e.g. absorbing chemicals or emission, or by generating clean air or water.



Global Change Award 2018

Expert panel

These ten advisors are chosen for their extensive knowledge within the fields of fashion, environment, circularity and innovation. Together with the public vote, they will help us crown the five winners of the Global Change Award 2018.



TOP ROW FROM LEFT:

Bandana Tewari, Editor-at-large, Vogue India.

Chiling Lin, Actress and sustainability influencer.

Dame Ellen MacArthur, Founder of the Ellen MacArthur Foundation.

David Roberts, Founder of Exponential Leadership, Chairman in 1Qbit Information Technologies Inc.

SECOND ROW FROM LEFT:

Edwin Keh, Chief Executive Officer of The Hong Kong Research Institute of Textiles and Apparel.

Lewis Perkins, President Cradle to Cradle Products Innovation Institute.

THIRD ROW FROM LEFT:

Sophia Bendz, Executive in residence at Atomico.

Steven Kolb, President and CEO The Council of Fashion Designers of America.

Vikram Widge, Head, Climate Finance & Policy, IFC, World Bank Group.

Xiuhtezcatl Martinez, Youth Director, Earth Guardians.

Last year's winners

Game-changing innovations awarded at the City Hall in Stockholm



On April 5, 2017, the Global Change Award ceremony was held at the City Hall in Stockholm.

"In this second round of Global Change Award we received 2,885 innovative ideas from 130 countries, which is even more than last year. Cross-border challenges call for a cross-border approach. I am convinced that by bringing together people from different industries, with different backgrounds and perspectives we can make a fundamental shift in

the fashion industry to protect both the people and the planet," said Karl-Johan Persson, board member of the H&M Foundation and CEO of H&M group.

The five winning innovations were chosen by an international expert panel, with among others Vikram Widge, Head of Climate and Carbon Finance at the World Bank Group, Rebecca Earley, Professor in Sustainable Textile and Fashion Design at University of the Arts London and Amber Valletta, supermodel, actress,

and sustainability influencer.

"On a planet that is not sustainable, every industry must change its practices. The Global Change Award is one of the boldest efforts to catalyze transformation in an unsustainable industry, and these winners embody the enormous potential of innovative science and technology to make a difference," said Ellis Rubinstein, President and CEO at The New York Academy of Sciences and member of the 2017 expert panel.

The GCA Innovation Accelerator

A year of specialized support taking your innovation to the next level

The award ceremony in Stockholm marks the start of an intense journey for the Global Change Award winners. Perhaps even more valuable than the financial grant, the teams are also provided with a one-year accelerator program with support and exclusive access to core areas of the fashion industry.

The program is designed and provided in partnership with Accenture, one of the world's foremost strategy and consulting companies, and the KTH Royal Institute of Technology in Stockholm—one of Europe's leading technical and engineering universities.

Throughout the year, the teams meet with the H&M Foundation, Accenture and KTH in three cities

that are central to the fashion industry, spending a week together for intense coaching, business development and industry networking. During the year the winners also have constant access to the global expert networks of the three partners.

Erik Bang, project manager for Global Change Award at the H&M Foundation, says that the main goal for the accelerator program is to scale and speed up the development of the innovations.

"This accelerator is like no other. We want the winners to have an impact on the industry and planet as fast as possible. So we strive to be a true catalyst, helping them cut years off their time line. And we do this without taking any ownership or IP rights," he says.

Step 1 Innovation Bootcamp

Stockholm, Sweden

The year starts with an intense bootcamp week, focused on broadening the the winners' perspectives, assessing technology readiness level and what the teams will need to work on during the year. "It's easy to overestimate the maturity and market fit of your idea," says Erik Bang, "and a core part of the accelerator is about testing your assumptions now instead of in five years' time when it might be too late."

The teams are also trained in media presentation, while widening their network and understanding of various links in the complex fashion value chain.

"From a technical point of view, one of the main challenges facing these teams is scaling up from lab to market, and I hope we can support them in that by connecting them to the right people," says Gustav Notander, business coach at KTH Innovation and coordinator of the bootcamp week in Stockholm.

Step 2 Customer and Retail Insights

New York, USA

The teams meet again in the fashion capital New York, to dig deep into the retail and marketing end of the fashion industry. The winners learn about the future of consumer behavior, and they get access to networks where they can pave the way for future collaborations.

Throughout the year, the accelerator program is also adjusted for the needs of each team, with constant access to the global experts and networks of Accenture, KTH and the H&M Foundation.

"The skills and knowledge that we hope to bring to the teams throughout the accelerator range from being able to pitch your idea to an investor or partner, to learning how to put a proper value on your idea and negotiate. We tailor the program to bring expertise to the areas where the winning teams need it the most", says Jennie Perzon, senior manager within Accenture's Sustainability Strategy practice in Sweden.

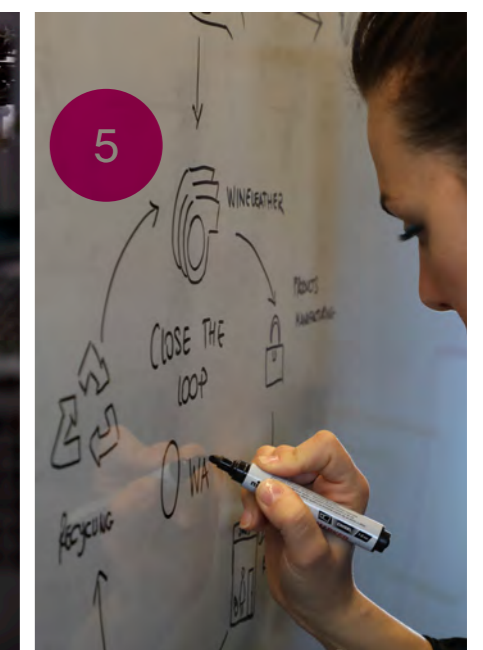
Step 3 Production Fundamentals

Shanghai, China

The week in Shanghai is focused on the production part of fashion. The winners visit manufacturers and meet with suppliers to learn about processes, materials, economics, volumes and distribution. The teams meet stakeholders, decision makers and influencers in the industry.

After this third and last intensive accelerator week, virtual updates are made with the teams to put further funding of their innovations on the agenda.

"During the year we equip the teams with a toolbox full of skills, networks, access and insights," says Erik Bang. "At the end of the accelerator we invite them back to Stockholm as they become GCA alumni and can share their experiences with the next set of winners as mentors. To hear from peers having followed the same journey as you are embarking on is very powerful and inspiring."



1. The first year's winners of Global Change Award visited the head office of Vogue Italia magazine in Milan.
2. Exposure to international media at the Global Change Award press conference in Stockholm.
3. Coaching, mentoring and networking at Accenture's digital innovation centre in Milan.
4. Visiting major manufacturers has proven groundbreaking to the development of the previous years' winning innovations.
5. Pushing innovations forward during the bootcamp week in Stockholm.



GCA 2017 winner: Grape Leather

Using leftovers from wine making to create fully vegetal leather. Granted €300,000.



The team: Rosa Rossella Longobardo, Gianpiero Tessitore, Valentina Longobardo and Francesco Merlino from Italy.

In addition to requiring the lives of millions of animals annually, animal leather production affects the environment by using acids, heavy metals and large amounts of water for tanning. Production of synthetic leather alternatives might save the lives of animals, but generates pollution with synthetic polymers, plasticisers and solvents.

Architect Gianpiero Tessitore was working on his furniture designs when he realized that the fashion industry still can't offer a truly green alternative to animal and synthetic leather.

Together with industrial chemist Francesco Merlino, he embarked on a mission to find one. After three years of

“Every year, 26 billion liters of wine is produced globally. With such a huge quantity of grape leftovers we will be able to produce 3 billion square meters of leather. That’s 15 times the surface of Stockholm!”

research they discovered that the fibers and oils from winemaking leftovers is ideal for making 100 percent vegetal leather. Instead of being burnt (and thereby releasing harmful carbon dioxide into the atmosphere), the grape stalks and skins can be used in a new production process

that doesn't require solvents, chemicals or other pollutants. The process even generates water instead of consuming it.

Valentina Longobardo, head of communications in the team behind the innovation, says that their new grape leather could potentially replace production of both animal and synthetic leathers.

“Every year, 26 billion liters of wine is produced globally” she says. “With such a huge quantity of grape leftovers we will be able to produce 3 billion square meters of leather. That’s 15 times the surface of Stockholm!”

In April 2017, the public voted for the grape leather team to be granted €300,000—the largest part of the total



grant of €1,000,000. The second annual Global Change Award ceremony in Stockholm also marked the start of their one-year accelerator program with H&M Foundation, Accenture and KTH Royal Institute of Technology.

“After the week in Stockholm we started to hire fashion, marketing and finance professionals to our team. The grant gave us the option to get specific and valuable consultancies and take the first steps in order to switch from a pilot to a semi-industrial state,” says Valentina, adding that the award also gave the team crucial media attention.

“Since the award, we get daily media requests for interviews and invitations to

interesting events related to sustainable fashion and circular economy.”

The grape leather team is currently working on their very first prototypes for handbags, shoes, garments and furniture. These will be revealed to media, companies and brands in October, at an event in Milan included in the one-year Global Change Award accelerator program.

“The Global Change Award gives us unique networking opportunities, as well as training in the best ways to start collaborations in the fashion industry,” says Valentina.

1 & 5. The Grape Leather team in Stockholm for the Global Change Award cere-

mony and accelerator bootcamp week.

2. The 100 percent vegetal leather made from grape stalks and skins is a green alternative to animal and synthetic leather.

3. Chemist Francesco Merlino and architect Gianpiero Tessitore in the lab. It took them three years of research to discover that wine marc has the perfect properties for making leather.

4. Leather for the first prototypes of grape leather accessories such as handbags, shoes, as well as garments and furniture, are currently being produced.

GCA 2017 winner: Solar Textiles

Climate positive fabrics from sunlight and biomass.
Granted €250,000.



Team members Saurab Tembhurne, Miguel A. Modestino and Adlai Katzenberg at the Global Change Award accelerator bootcamp week in Stockholm.



Synthetic fabrics such as nylon are made from oil in processes that pollute the air, are energy intensive and emit greenhouse gases. But what if your clothes could trap carbon from the environment and help clean up our planet instead? This was the thought that brought chemical engineering professor Miguel Modestino at New York University and professor Sophia Haussener at Swiss Federal Institute of Technology in Lausanne to the idea of solar textiles—a production process for nylon that only uses water, plant waste and solar energy.

“We discovered that nylon is made via reactions that require electricity. That allows us to incorporate solar cells into the

chemical production process,” explains Miguel. “Instead of using petroleum as the raw material, we can use biomass,” he continues, explaining that in this way, the clothes produced will actually bind greenhouse gases from the plant waste instead of releasing them into the air.

Along with a Global Change Award grant of €250,000, Miguel and his team were also rewarded the chance to participate in the year-long Global Change Award accelerator program.

The team sees the accelerator program as an important chance to make new connections between the fashion industry and the academic world of science and engineering. The accelerator

started with an intense week in Stockholm in April.

“The Stockholm event was an eye-opener for our team,” says Daniela Blanco, also part of the Solar Textiles team. “We understood how our work can help influence the transition of the fashion industry towards a climate positive value chain. In the past months, our team has worked hard to develop prototypes for two key steps in the production of nylon. In parallel, our teams at New York University and Swiss Federal Institute of Technology in Lausanne have been working closely with the H&M sustainability office to bolster interactions between the fashion industry and researchers.”

“Since we won the Global Change Award, companies ranging from material developers to stocking manufacturers have approached us with interest in our work.”

Daniela adds that the Global Change Award has given the Solar Textiles team a platform to showcase their work.

“Companies ranging from material developers to stocking manufacturers have approached us with interest in our work,” she says. “This has helped us understand

what the main pain points in the market are, that our research can tackle.”

What is your advice for someone interested in applying for the next edition of the Global Change Award?

“Try to take risks,” says Miguel Modestino. “For us to be able to make this industry more than climate positive, it will take really revolutionary ideas, so try to be less conservative in your thinking.”

1. Team members from New York University at the first intensive bootcamp week of the one-year Global Change Award accelerator program, which they considered an eye-opener for putting their innovation to use in the fashion industry.

2. Team leader Miguel Modestino accepts the award from Karl-Johan Persson, board member of the H&M Foundation and CEO of H&M group, and Diana Amini, Global Manager of the H&M Foundation.

3. Team members Daniela Blanco, Miguel A. Modestino, Saurab Tembhurne and Adlai Katzenberg at the Global Change Award ceremony in Stockholm.

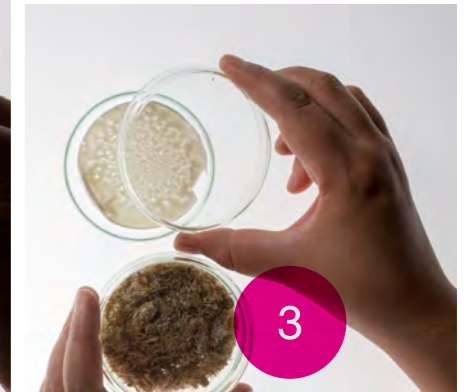
4. The innovation: producing nylon with only water, solar energy and biomass.

GCA 2017 winner: Manure Couture

Turning cow manure into biodegradable textiles.
Granted: €150,000.



Team leader Jalila Essaïdi from the Netherlands. Above right: with team members George Johannes van Trier and Virendya Batja.



While growing up in the countryside in the Netherlands, Jalila Essaïdi was always fascinated by nature.

“As a child I used to bring plants and sick animals home with me, and I liked books about nature, about how things are put together and how they work,” recalls Jalila, who eventually became an artist and entrepreneur specializing in the fields of modern biotechnology and biological art.

“With biotechnology, we can mimic nature and use it in solving problems worldwide, because nature offers us the most beautiful materials”, she says.

After a number of innovative projects, including a bullet-proof skin enforced

“I took the manure into the lab and discovered that it was full of wonderful ingredients. We started rearranging these ingredients into new, valuable materials like bioplastics and biotextiles”

with spider silk, Jalila was approached by the agricultural sector of the Noord-Brabant province to find a solution to the growing problem with surplus cow manure.

“The manure problem is big—in Europe alone we have more than 1 trillion kilos of

manure annually. If we look at the United States, we are talking about manure lagoons, and in China we have farms of 150,000 cows,” says Jalila.

For a year, Jalila collaborated with policy makers, farmers, economists as well as the water and nature boards to delve deeper into the problem of excess manure, which poses huge risks to the environment and public health.

“I took the manure into the lab and discovered that it is full of wonderful ingredients,” recounts Jalila. “So we started rearranging these ingredients into new, valuable materials like bioplastics and biotextile.”

The process that Jalila’s team came

up with also reduces methane gas production from the manure, as well as preventing contamination of soil and water.

“The exposure of the award brought us other initiatives to help with successfully bringing our innovation to market. Under the guidance of KTH we are mapping out project specific objectives and milestones,” she says. “Through the H&M Foundation we get the opportunity to talk to anyone in the apparel industry and ask them any questions we’d like answered, which is also vital since this is a really closed industry with limited access. Finally, the expertise of Accenture dealing with global projects, exten-

ded across multiple industries, and our opportunity to ask them anything is also key for successfully implementing a truly sustainable version of our innovation,” she adds.

If you could give one piece of advice to someone thinking of applying for the next Global Change Award, what would it be?

“Do it! Give a shit about this planet and take your innovation to the next level!”

1. Entrepreneur and artist Jalila Essaïdi specializes in bio-based materials and biological arts.

2-3. Chemical processes turn the solid manure particles into high-grade cellulose pulp.

4. Jalila studied the manure in her lab.

5. In June 2016, the team presented the first-ever clothes made from cow dung at a fashion show in Eindhoven.

GCA 2017 winner: Content Thread

Facilitating sorting and recycling of clothes using a digital thread. Granted: €150,000.



The team: Peter Cockitt, Anura Rathnayake, Natasha Franck and Trevor O'Brien from the United States, Sri Lanka and the United Kingdom.

Each year, 80 billion new articles of clothing are produced around the world, but textiles has one of the poorest recycling rates of any reusable material today.

One of the biggest barriers to textile recycling is that we often don't know what the clothes are made of. To bridge this communication gap between manufacturers and recyclers, Natasha Franck and her team have developed a digital thread that stores all the content information needed to recycle each garment automatically. The thread looks and feels much like a normal thread, but through RFID (radio frequency identification) technology, it can store digital informa-

tion and be scanned from a distance. Lasting over the garment's lifetime, the thread reduces waste throughout the entire supply chain and drives the transition to a circular system in which materials can be perpetually recycled.

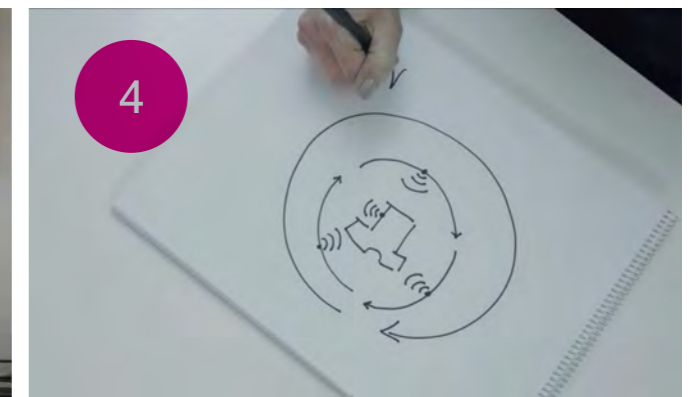
"I think within the next ten years there will be billions of objects that are brought online into the digital world," says team leader Natasha Franck. "If we can connect these digital objects for the purpose of sustainability it can be radically transformative, and every object can be at its highest and best use at all times."

Natasha especially looks forward to the study trip to Shanghai included in the Global Change Award accelerator.

"Being exposed to the manufacturing side and understanding how the brands are working on the production will be really valuable for us to make sure that our program is fully integrated and efficient within the existing systems that they have in place," she says.

In addition to facilitating recycling of clothes, the content thread can also be valuable for supply chain management, anti-theft and for creating "smart" connected clothing.

The team behind the content thread have partnered with circular economy leader the Ellen MacArthur Foundation, and their facility in Sri Lanka has already begun production of the RFID tags that



"Within the next ten years there will be billions of objects brought online into the digital world. If we can connect these objects for the purpose of sustainability, it can be radically transformative."

can be sewn into clothes.

Natasha sees the Global Change Award accelerator as a chance to introduce her team's innovation to different stakeholders within the fashion industry, to ultimately connect them to each other.

"Across the supply chain you have

manufacturers and producers, retail brands, consumers, the end of life (and hopefully the next life) and recyclers," she says. "Our program is about connecting all that intelligence. So for us, the Global Change Award really presents an opportunity to introduce this system as a global solution and engage all these stakeholders."

1-2. The team members travelled from the United States, Sri Lanka and the United Kingdom to Stockholm in April for the Global Change Award ceremony.

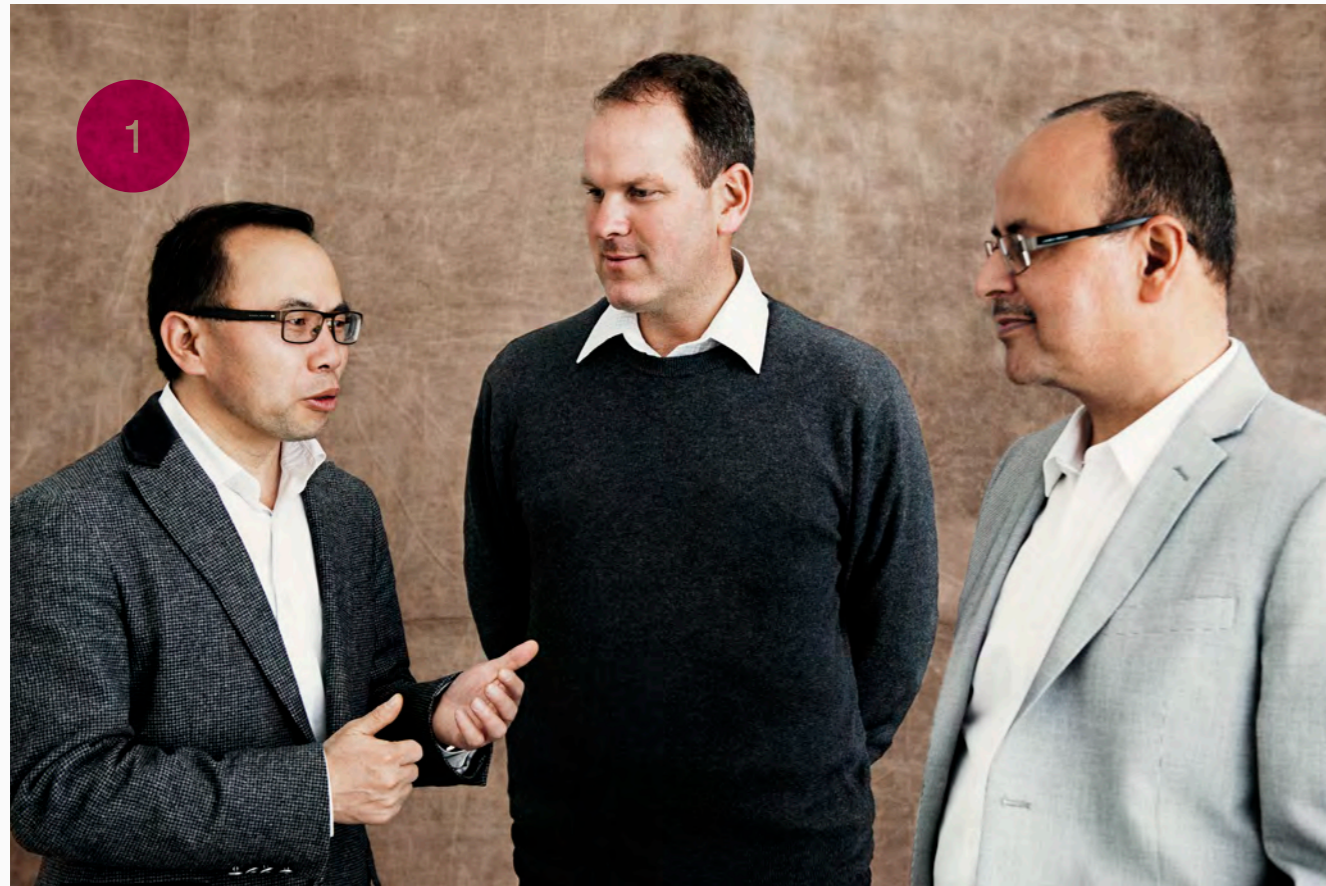
3. Natasha Franck with team member Anura Rathnayake, a textile engineer

specialised in advanced fiber materials.

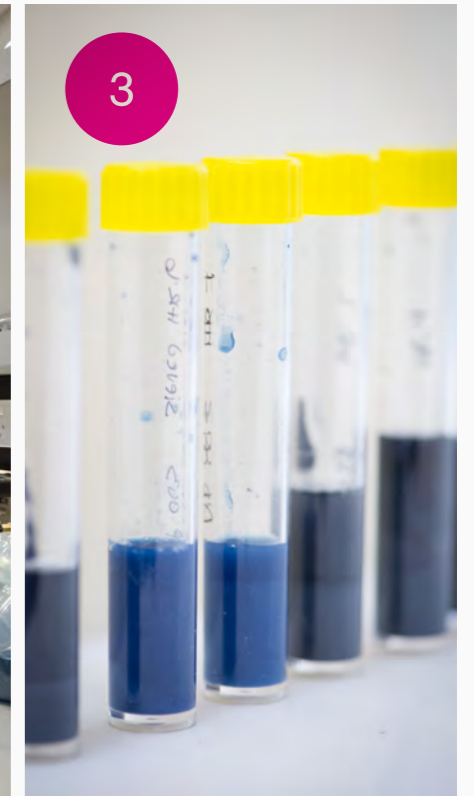
4. Natasha Franck's sketch of how the digital thread carries and communicates content information throughout the fashion value chain, enabling easier recycling in the end.

GCA 2017 winner: Denim-Dyed Denim

Letting used denim give colour to new denim.
Granted €150,000.



Team members Xungai Wang, Christopher Hurren and Rangam Rajkhowa from Deakin University, Australia.



Jeans are one of the most iconic styles in fashion, and the single most common apparel item on the market. Unfortunately, the traditional process of dyeing denim requires large amounts of water and energy. In the colouring process alone, the average pair of jeans uses 200 liters of water.

No wonder that professor Xungai Wang and his team of scientists at Deakin University in Victoria, Australia, were excited when they came up with a process that lets one old pair of jeans dye ten new ones, with zero water usage.

Xungai's passion for fibers started early. Growing up in China, he used to go out in the fields to pick the cotton that

“The Global Change Award has enhanced global interest in our work. And just during the first week of the accelerator program in Stockholm, we got so much more clarity in the magnitude of our innovation.”

his parents used for spinning yarn and weaving clothes.

“Fibers are such an interesting material with so many applications,” says Xungai, whose team of scientists at the university has been researching powdering processes for different fibers.

“One day we talked about applying the powdering process to colour other fabrics, such as denim. One of our team members did some initial trials which were very promising,” he explains.

With the new process discovered by the five scientists, old jeans can be pulverized and used to colour new denim, replacing traditional colouring methods.

By coating the new denim with pulverized old jeans, 50 percent of energy and water use is cut while material waste is eliminated, as the old denim is reused instead of going to landfill sites.

“Just during the first week of the accelerator program in Stockholm, we got much better clarity in the magnitude

of our innovation, and also in the way forward,” says Xungai. “The accelerator program helps us understand the tricks and the challenges in taking an idea and turning it into a commercial reality. It exposes us to the roadblocks we may encounter, and the best ways to address these roadblocks.”

The team hopes to use the grant to buy equipment for scaling up from laboratory samples to producing complete denim garments.

“The Global Change Award has enhanced public interest in our work, which has raised the profile of our research significantly,” says Xungai. “Our plan is to make many pairs of denim using the new

process for the fashion event within the accelerator program in Milan in October.”

1. Team members professor Xungai Wang, Dr Christopher Hurren and Dr Rangam Rajkhowa travelled to Stockholm for the Global Change Award ceremony and accelerator bootcamp week.

2-3. The researchers were excited when they found that the laboratory samples of new denim dyed with used, pulverized denim looked exactly like denim dyed with traditional dyeing methods.

4. By using pulverized used denim garments to colour new ones, the traditional

water- and energy-consuming dyeing process can be surpassed.

5. The team at the Global Change Award ceremony in Stockholm: Dr Nolene Byrne, Dr Rangam Rajkhowa, Dr Rebecca Van Amber, Professor Xungai Wang and Dr Christopher Hurren.

Early Bird Winner: Unspun

A machine that spins custom-fitted clothes
—and then unspins them again.



The team: Walden Lam, Beth Esponette and Kevin Martin from the United States.

Imagine walking into a fitting room and having a new pair of jeans spun for your exact body shape.

Three entrepreneurs from the universities of Stanford and Colorado have set their minds on realising a fantasy with a machine that takes the customer's exact measurements in 3D, and then spins the desired piece of clothing on demand. This way, the current manufacturing and stock waste can be eliminated.

Perhaps even more revolutionary, the process can also be reversed—old garments made with the technology can be put into the machine and converted back to a reusable spool of yarn, which means no clothes are thrown away.

In the second annual Global Change Award, the innovation of Beth Esponette, Kevin Martin and Walden Lam was awarded the Early Bird prize as they were among the first to apply.

The prize gives them the chance to join the other Global Change Award winners on a study trip to Milan.

"We are looking forward to meeting the other teams, since we have been really inspired by the collective goal to make fashion circular," says team member Walden Lam. "Also, as we are a very knowledge driven company, it will be valuable to get in touch with the craftsmanship and tradition in one of the fashion capitals of the world."

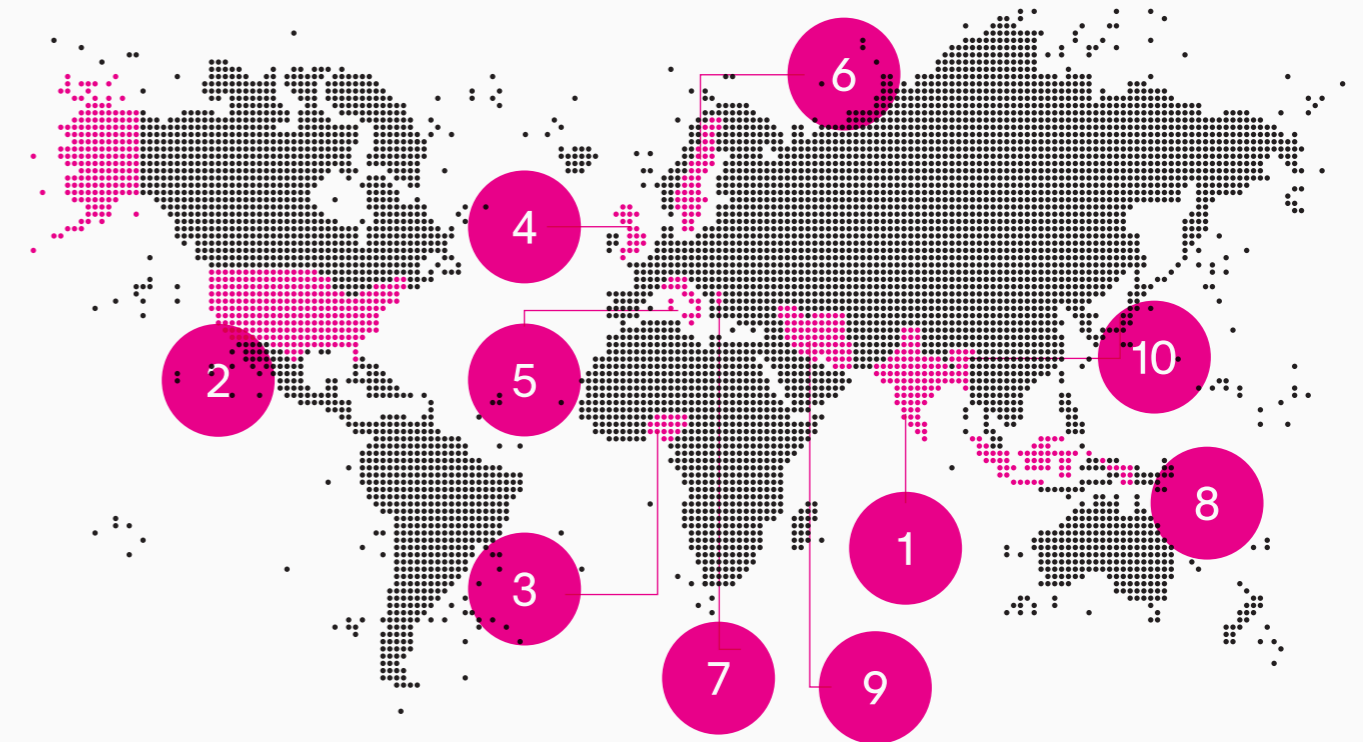
Early Bird 2018

Are you next?

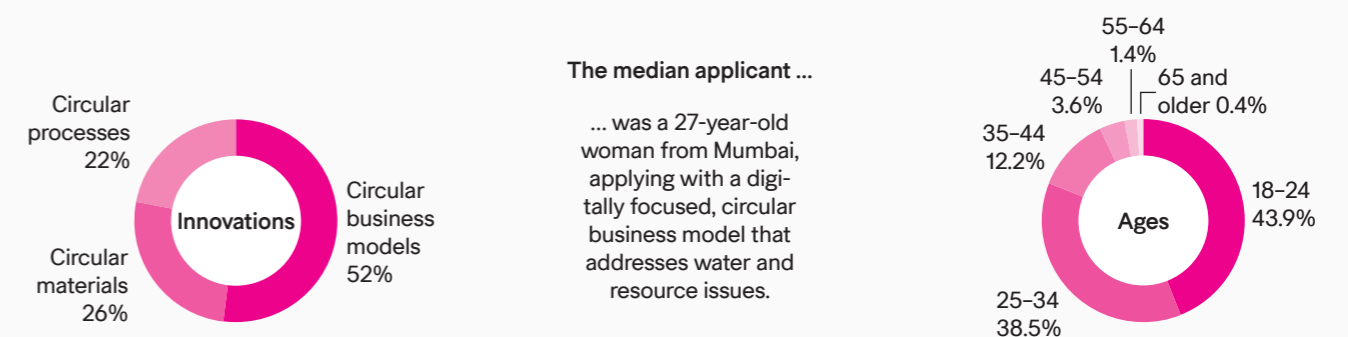
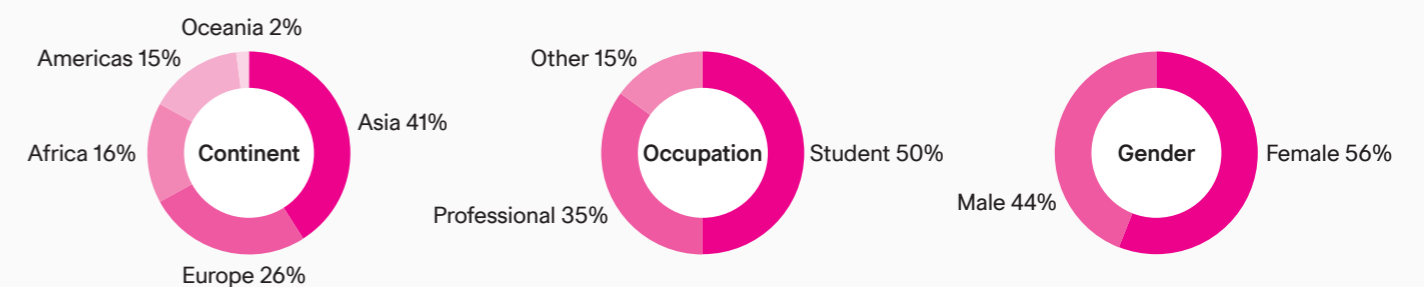
Entries received before October 6 have the chance of winning the Early Bird competition. The Early Bird winner will be invited to take part in one of the accelerator weeks that are arranged for the Global Change Award winners in key fashion and innovation cities across the world. The trip gives the Early Bird winner an exclusive insight into the industry, along with an opportunity to establish contacts and learn more about circularity and the fashion industry value chain.

Global Change Award 2017

2,885 entries from 130 countries



Top 10 countries by number of entries:
1. India. 2. USA. 3. Nigeria. 4. UK. 5. Italy. 6. Sweden.
7. Macedonia. 8. Indonesia. 9. Iran. 10. Bangladesh.



The median applicant ...

... was a 27-year-old woman from Mumbai, applying with a digitally focused, circular business model that addresses water and resource issues.

First year's winners

What happened next?



“The accelerator program brought us closer to the market, helping us to hire more people and improve our technology to produce on a larger scale.”
—Enrica Arena, Italy



In February 2016, the first ever Global Change Award ceremony was held at the City Hall in Stockholm. On stage were five teams anticipating the intense journey of a year's accelerator program with support from the H&M Foundation, Accenture and the KTH Royal Institute of Technology in Stockholm.

Michael Hummel and his team from Aalto and Helsinki Universities in Finland were awarded the biggest part of the grant, €300,000, for discovering a way to turn cotton waste into a new, cotton-like fabric. To make the process completely circular and scalable with zero waste, the team has been encouraged by the Finnish Funding Agency for Innovation to apply for another three years of research

funding. “The award gave us a broader and more international audience. It motivated our previous partners to stay dedicated to us, as well as new partners to join,” says Michael.

Akshay Sethi and Moby Ahmed from California were granted €250,000 for their discovery of a microbe that can break down polyester to make it recyclable. Akshay says that the accelerator program helped expand their business network: “The Global Change Award put us in a better position to raise money and hire competent people such as experienced chemical engineers,” he says, adding that the friendship that developed between the winners during the accelerator year has been of enormous

value. “Coming from a chemical perspective, I've learnt so much about product development from the other winners.”

Adriana Santanocito and Enrica Arena from Italy were granted €150,000 for developing a way to turn citrus waste into biodegradable textiles. A year after winning the Global Change Award, the fashion brand Salvatore Ferragamo launched the first-ever collection made from Adriana's and Enrica's innovation. Although the team had already been in contact with the brand before the Global Change Award, Enrica says that thanks to the accelerator program they were finally able to produce the textile needed for the collaboration. “The accelerator program brought us closer to the market,

helping us to hire more people and improve our technology to produce on a larger scale,” she says.

Ann Runnel from Estonia invented a prototype for an online market where clothes manufacturers can sell textile leftovers to other factories, designers or fashion brands. Her team also developed a software system that makes it easier for factories to manage leftovers, in order to either sell them or use them for new garment production. Their innovation was granted €150,000 and access to the one-year accelerator program included in the Global Change Award. “During this year, we've launched a pilot with H&M on three factories in Bangladesh,” says Ann, hoping the first garments made from tex-

“The Global Change Award has opened so many doors. If we hadn't won the award, I think it would have taken us at least five years to reach the point we're at today.”

—Ann Runnel, Estonia

tile leftovers will be sold in stores soon. She concludes that the accelerator year has been life-changing. “We've all become good friends and the Global Change Award has opened so many doors. If we hadn't won the award, I think it would have taken us at least five years to reach the point we're at today,” she says.

Tjerd Veenhoven from the Netherlands was also awarded €150,000, for the groundbreaking idea to make textiles out of algae. Since then, he has been able to launch partnerships with several academic institutions in Europe to do further research on the process. He says that he doesn't believe the extensive research had been possible without the award.

“If you approach an academic institution with a vision without backing, it can sound pretty silly. But the Global Change Award makes it easier, since most people know that the expert jury has quite a lot of knowledge on how these things work. That allows you to come in at a higher level from the start.”

5 megatrends shaping future fashion

Insights based on the Global Change Award applications of 2017.

The 2017 Global Change Award received 2,885 applications from 130 countries. By leveraging the Global Change Award partner Accenture's capabilities in analytics and data visualization on this large data set, we were able to identify interesting in-

sights on future trends within sustainable fashion. Looking at key words commonly used in the applications and applying analytics to identify patterns and clusters, five megatrends stand out:

Megatrend 1	Megatrend 2	Megatrend 3	Megatrend 4	Megatrend 5
Power of Nature	Rent a Closet	Long Live Fashion	Innovative Recycling	Connected Clothes
<p>This trend focuses on enriching materials from the many hidden resources on planet earth, materials previously seen as waste. This will require a complete rethinking of what a fabric is and can be—making clothes from anything from citrus peel to cow manure. Making this work at a larger scale requires a shift in consumer mindset of what a quality fabric is, but also new ways of measuring quality.</p> <p>Sustainable Impact: Production of textiles made from natural materials is resource-efficient and environmentally friendly, and decomposing clothes made from organic textiles is a lot easier than that of synthetic materials.</p>	<p>By re-thinking the need for owning your own clothes, a wide range of opportunities opens up in the circular ecosystem. Digital platforms and the concept of a sharing economy gives rise to new, collaborative business models such as subscriptions. Why own clothes you are using just a few times a year when you can rent them?</p> <p>Sustainable impact: Increased utilization rate of each clothing item will eliminate wasted capacity in the clothing industry. Decreased need to buy new clothes for every new occasion or trend minimizes what gets thrown away.</p>	<p>Using innovative platforms to re-sell clothes you no longer want is definitely the way to go in prolonging the clothing lifecycle and reaching a circular fashion industry. Other ways to prolong the lifecycle of clothing include leveraging repair, re-design and re-styling concepts to make old, out-of-style clothes feel like new again.</p> <p>Sustainable impact: With multiple owners of each clothing item, the need for buying new clothes decreases. Repairing an old item of clothing instead of producing a new one is also less resource consuming.</p>	<p>Statistics show that most of the clothes that are currently thrown away as waste could have been recycled, but the current recycling market for clothes is very immature and faces several technical challenges. This trend recognizes circular processes for extracting value out of what was earlier thought of as waste and highlights innovative business models, re-thinking how to create incentives for collecting worn-out clothing.</p> <p>Sustainable impact: With more efficient methods, larger volumes of old clothes can be collected, resulting in more value being brought back to the system.</p>	<p>Smart, connected clothing opens up new opportunities for hyperpersonalization, making clothes an even more integrated part of your lifestyle. It also has a fundamental impact on garment traceability and automated material sorting in the textile recycling process, while enabling transparency in the fashion value chain—from sourcing and production to recycling.</p> <p>Sustainable impact: Traceability of material resources, easier recycling and automated sorting of used clothing. Personalized clothing based on individual needs and preferences increase utilization rate and decrease the risk of throwing away clothes after minimal use.</p>

H&M Foundation

The H&M Foundation is a global foundation, privately funded by the Stefan Persson family, founders and main owners of H&M. Its mission is to drive long lasting positive change and improve living conditions by investing in people, communities and innovative ideas.

Through partnerships with prominent organizations around the globe, the H&M Foundation drives change within four focus areas:

- Education**—We advocate for quality education for all children.
- Water**—We support worldwide access to clean water and sanitation.
- Equality**—We promote equal opportunities for people globally.
- Planet**—We ensure living conditions by protecting the planet.

In addition to this, the H&M Foundation can also provide emergency relief. Since 2013, the Stefan Persson family has donated SEK1.3 billion (\$177 million/€144 million) to the H&M Foundation.

For more information, visit hmfoundation.com and globalchangeaward.com

H&M FOUNDATION

in collaboration with



accenture
High performance. Delivered.