

Annual Report 2018





www.changingmarkets.org

Published in April 2019

Designed by Pietro Bruni - helloo.org

Printed on recycled paper

Contents

Foreword from our directors	5
Changing Markets in numbers	7
Bad Medicine	9
Carpet recycling	13
Dirty Fashion	17
Milking it	23
Food fortification	27
Annual accounts	31
Our people	32
Endnotes	34

Our mission

The Changing Markets Foundation was formed to accelerate and scale up solutions to sustainability challenges by leveraging the power of markets. Working in partnership with non-governmental organisations (NGOs), other foundations and research organisations, we create and support campaigns that shift market share away from unsustainable products and companies and towards environmentally and socially beneficial solutions.



Our approach is based on two key ideas:



Sustainability is an urgent challenge to which most solutions already exist



Market forces can be leveraged to drive rapid and self-reinforcing change towards a more sustainable economy



Changing Markets was formed to accelerate this transition.

Foreword from our directors

Many will remember 2018 for a rise in extreme weather events - wildfires, hurricanes, floods and record-breaking temperatures - and for the International Panel on Climate Change's dire warning that unless we get global carbon emissions under control within the next 12 years, we risk living on an inhospitable planet. The year was also marked by the rise of global protests demanding equality, climate action and fairer taxation - from #MeToo movement to climate strikes by schoolchildren. While divisions in societies seem to run deeper and deeper, people appear to be losing patience with political and other elites and taking to the streets.

Where does this leave the Changing Markets Foundation and our ways of working?

In 2018, together with our NGO partners, we continued to put pressure on market players through our successful campaigns, forcing companies to rise up and take responsibility for the problems they create. Our Dirty Fashion campaign successfully exposed polluting viscose manufacturers and the brands buying from them. After the launch of our second report, *Dirty Fashion revisited: Spotlight on a polluting viscose giant*, which showed that the biggest viscose manufacturer, Aditya Birla, was continuing to pollute water and air around its factories in Indonesia and India, we finally started to see some action. Five major fashion brands and retailers signed up to our *Roadmap towards responsible viscose & modal fibre manufacturing* and committed to implementing closed-loop production systems in their viscose supply chains by 2023-25. This was followed by a year of engagement with producers, which subsequently committed significant financial investment to improving their factories and cleaning up pollution affecting local communities. By the end of 2018, eight major retailers and fashion brands had signed up; many others in the fashion industry were informed about these objectives and working towards achieving them.

Another sector that made some positive steps towards transformation in 2018 was the carpet industry. Throughout 2018, Changing Markets, together with our NGO partners, exposed the issue of toxic chemicals in carpets and the ways in which they harm health and undermine circular economy when recycled into new products. Three major European producers - Tarkett, Interface and DSM-Niaga - supported the call for mandatory, ambitious policies to help transition the carpet sector towards a truly circular economy. In addition to expressing support for well-designed Extended Producer Responsibility (EPR) schemes as necessary drivers for this transition, these front-running companies called for a phaseout of hazardous substances and virgin materials.

We very much welcomed this move, and hope that progressive EU countries and US states will in 2019 adopt policies to make carpet industry more circular.

Changing Markets has also been very active in the food sector. After we launched a report exposing the lack of scientific rationale behind Nestlé’s range of infant formulas in February 2018, the company committed to phasing out sucrose and flavourings from its products globally. We then shifted our focus towards food fortification, addressing the urgent issue of micronutrient deficiencies in Mexico, where 9 out of 10 women do not get enough iron from their diets and 1 in 4 children suffer from anaemia. Our campaign received a lot of positive attention from the media, nutrition experts and civil society, and highlighted an opportunity for the incoming Mexican government to take a fresh look at how its fortification law is implemented, and to realise the potential benefits of fortification for the most vulnerable people.

In 2018, we also published two reports that were not directly linked to our campaigns, but that highlighted broader social issues relevant to environmental campaigning in general. The first report, *The false promise of certification*, explored the proliferation of voluntary initiatives and certification schemes we have encountered on many of our campaigns, which, rather than being part of the solution, have increasingly become part of the problem. We critically evaluated voluntary initiatives in the fisheries, palm-oil and textiles sectors, and developed a blueprint for how they could be improved. The second report, *Growing the good*, highlighted the global overconsumption of meat and dairy products, which has a big impact on climate emissions, land use and the loss of biodiversity. This report highlighted the beneficial impact that reducing meat consumption could have on numerous environmental crises we are facing, and showcased the solutions emerging from innovative companies and business models around the world.

In relation to media coverage, 2018 was also a successful year for Changing Markets. We continued to punch above our weight; our reports and investigations were featured in over 300 media stories all over the world, and we formed many rewarding partnerships in the process. Our objective for 2019 is to remain targeted, goal-oriented, creative campaigners. We will continue to expose problems and call for solutions, with no compromises for irresponsible corporations. We hope to inspire others in this process, and that our work continues to leverage the change we need to see in this world.

Nuša Urbančič, *Campaigns Director*

Joakim Bergman, *CEO*

CHANGING MARKETS IN NUMBERS 2018

WROTE, PUBLISHED AND TRANSLATED



RELEASED ON
3 CONTINENTS



16 REPORTS
IN 6 LANGUAGES

WITH 18
DIFFERENT LAUNCH
PARTNERS



WE TESTED

27  CARPET SAMPLES

38  WATER

 SLUDGE

 SOIL

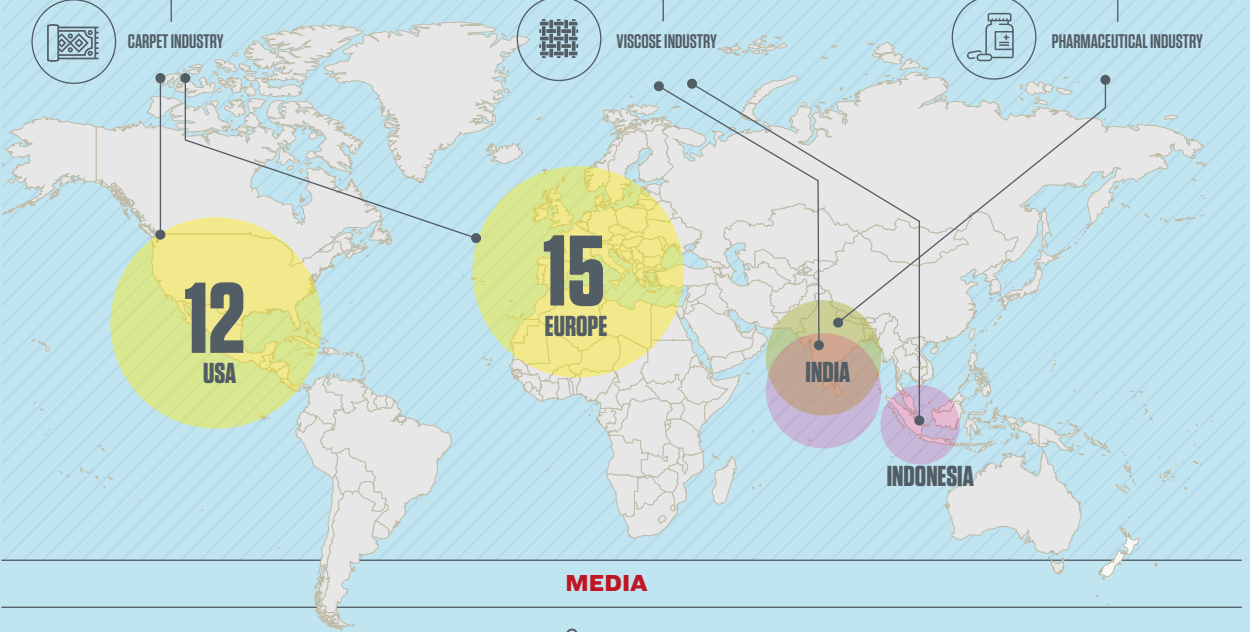
 AIR POLLUTION

17  WATER SAMPLES

FOR TOXIC CHEMICALS
CARPET INDUSTRY

FOR POLLUTION AROUND VISCOSE FACTORIES
VISCOSE INDUSTRY

FOR HEAVY METALS AND SOLVENTS
PHARMACEUTICAL INDUSTRY



MEDIA

EXCLUSIVE STORIES WITH

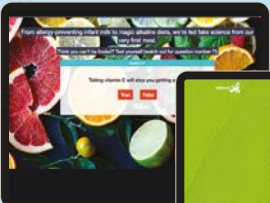


The
Guardian
WALL STREET JOURNAL

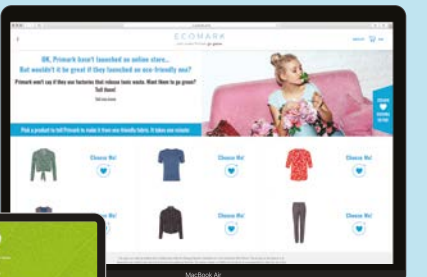


MEDIA COVERAGE: OVER 300 STORIES

 DIGITAL ASSETS



2 QUIZZES



1 WEBSITE

Our campaigns

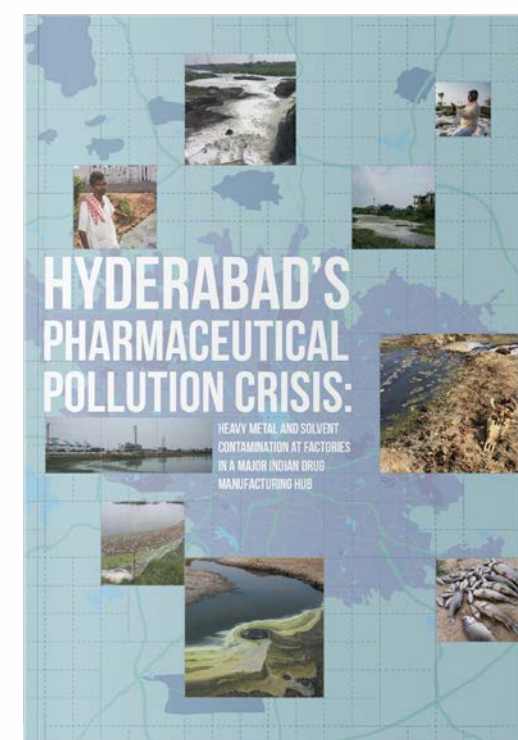
Bad Medicine

The problem

In 2018, Changing Markets continued to campaign against irresponsible manufacturing practices in the pharmaceutical industry, which are contributing to the global spread of drug-resistant bacteria. Public awareness of the threat posed by antimicrobial resistance (AMR) increased around the world, ratcheting up pressure on the industry and policymakers to act. Our work highlighted the need for robust regulation to curb the environmental impacts of pharmaceutical production, in tandem with other measures to bring down consumption.

UK Chief Medical Officer, Dame Sally Davies, kicked off 2018 by calling on pharmaceutical companies to adequately treat their manufacturing waste to prevent the spread of drug-resistant bacteria. An independent review, commissioned by the UK government previously, has estimated that drug-resistant infections could kill up to 10 million people a year by 2050 in the absence of effective measures to contain the threat.¹ Drug-resistant infections are predicted to cost the world US \$100 trillion in lost output between now and 2050, which is more than the current value of the global economy.² The World Health Organization (WHO) estimates that, in the EU alone, drug resistance is costing more than US \$1.5 billion in healthcare expenses and productivity losses.³

Our work



Hyderabad's pharmaceutical pollution crisis was published in January 2018

Building on previous Changing Markets research and investigations, in January we published a report with Nordea, the largest wealth manager in the Nordic region, entitled *Hyderabad's pharmaceutical pollution crisis: Heavy metal and solvent contamination at factories in a major Indian drug manufacturing hub*. The report centred on results from the testing of water samples, collected adjacent to pharmaceutical factories and some

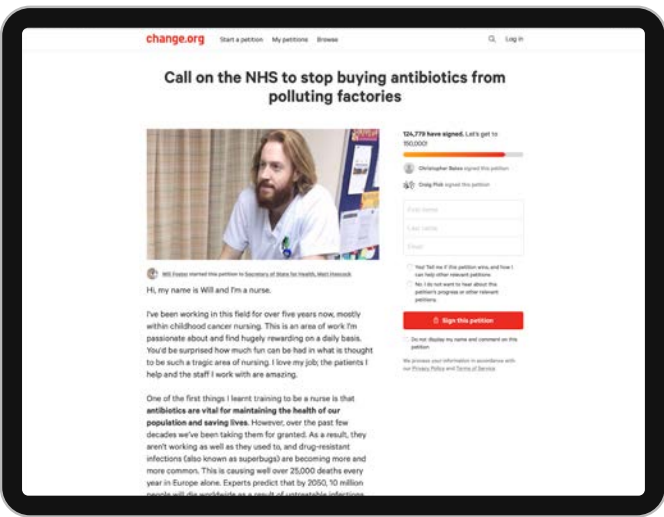
of the city's waterbodies, which highlighted the presence of a range of heavy metals and industrial solvents commonly used in pharmaceutical manufacturing. In some cases, these were found at concentrations many times higher than maximum regulatory limits or safe exposure levels, indicating substantial risk for human health and the environment. This showed that pharmaceutical companies in Hyderabad were continuing to discharge untreated or inappropriately treated wastewater into the environment, and that local and national authorities were failing to control the situation.

At the end of January, Changing Markets co-hosted an event at the European Parliament in Brussels with the European Public Health Alliance (EPHA) and the European Environmental Bureau (EEB), hosted by Member of the European Parliament Annie Schreijer-Pierik (EPP, NL), who called on the pharma industry to take action on pollution in the pharmaceutical supply chain. Along with EEB, Changing Markets published a report titled *Policy options for regulating pharmaceuticals in the environment*, which called for greater transparency in pharmaceutical supply chains, adequate and reliable evaluation of medicines' environmental impacts, and the prevention of emissions of pharmaceuticals throughout their lifecycle. Our campaign also continued to make waves in the UK; by summer 2018, an online petition calling on the National Health Service to stop purchasing antibiotics from polluting factories had garnered nearly 125,000 signatures from the general public.

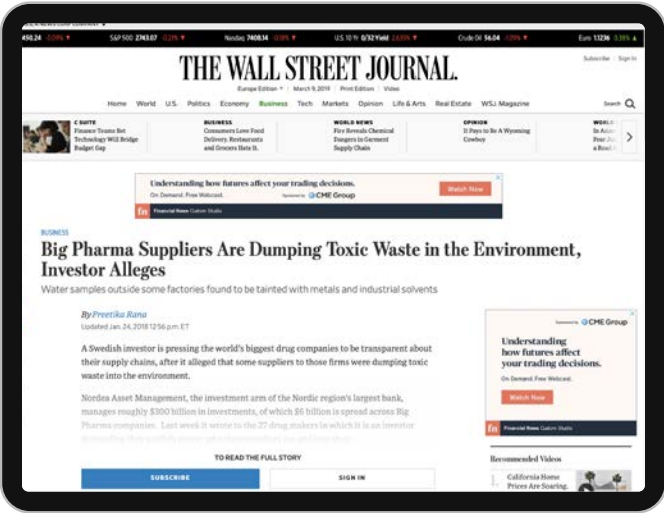
Outcomes and impacts

The report, *Hyderabad's pharmaceutical pollution crisis*, received coverage in global media outlets, including an exclusive in *The Wall Street Journal*. Publication coincided with the World Economic Forum in Davos, where the Access to Medicine Foundation launched its 2018 AMR Benchmark - the first detailed analysis of pharmaceutical company action against AMR, including responsible manufacturing. Our engagement with the Access to Medicine Foundation as the Benchmark was being designed, in which we highlighted the importance of addressing the environmental and health impacts of pharmaceutical manufacturing emissions, helped to place this key aspect on the agenda.

A series of major international media exposés on pharmaceutical pollution also took place in 2018. In April, Dutch current affairs programme *Zembla* released a documentary, *The real price of cheap medicine*, which featured findings from an on-the-ground investigation in Hyderabad and drew on Changing Markets' previous research in this area. In June, Canada's national press agency (Canadian Press) published a series of articles on AMR, including an investigation into pharmaceutical manufacturing in Hyderabad, for the Canadian market, while *Le Monde* featured a similar investigation in France in December.

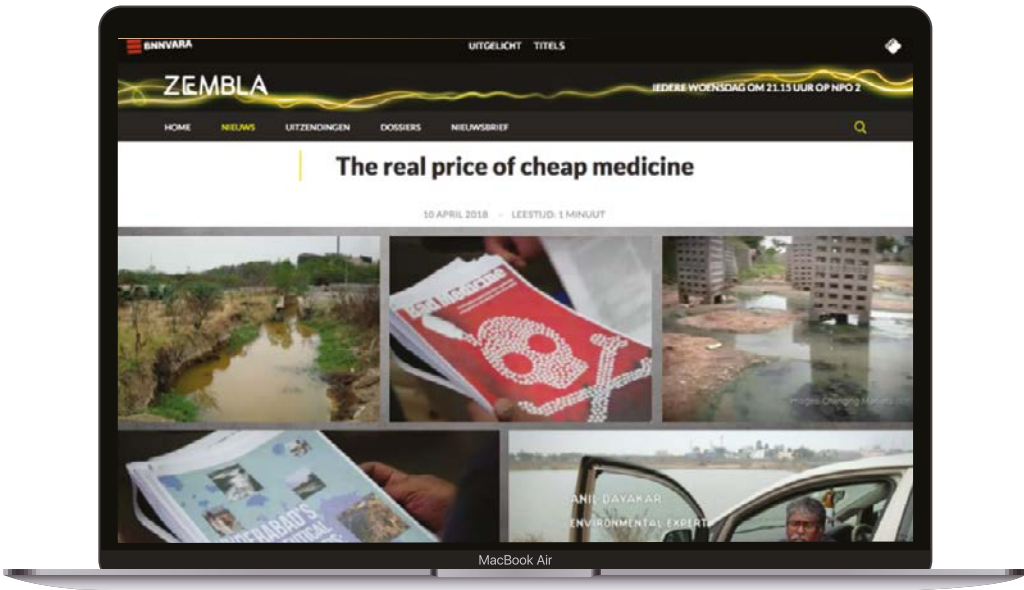


Our petition on Change.org garnered 125,000 signatures



The Wall Street Journal ran an exclusive on our report in January 2018

A documentary by Dutch programme Zembla featured Changing Markets research



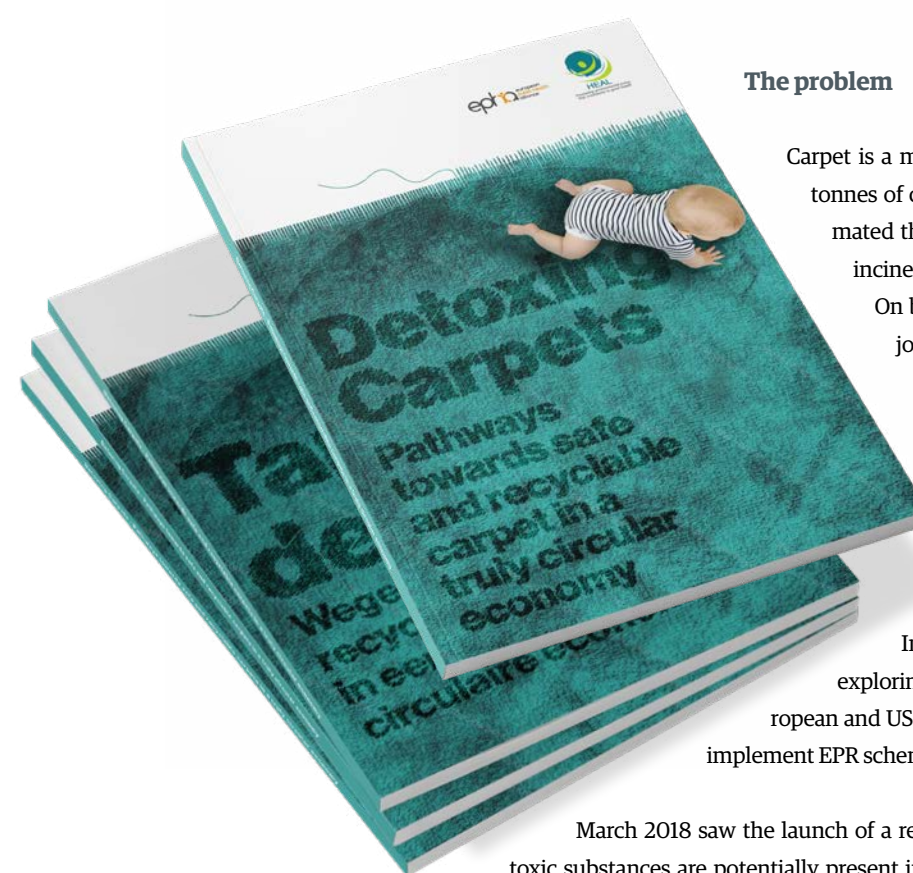
In July, following reports that the EU had scrapped plans to tackle pharmaceutical pollution following pressure from drug manufacturers, Changing Markets coordinated a joint letter from NGOs, investors and the European water industry calling on the European Commission to include key measures in its much-delayed strategic approach on pharmaceuticals in the environment. Active pharmaceutical ingredients (APIs) are currently excluded from EU environmental regulation. The letter called for broadening the existing Good Manufacturing Practices framework to include the environmental impacts of pharmaceutical manufacturing, and for stronger rules on marketing authorisations for human and veterinary pharmaceutical products. Environment ministers from ten European countries also wrote to the European Commission expressing their concern about the delay.



"The underlying objective is to make better investments... The entire industry is sourcing from India. So, we need to know what is happening in India if we want to make better decisions"
Nordea, Wall Street Journal (January 2018)

WALL STREET JOURNAL

Carpet recycling



The problem

Carpet is a major waste stream across the globe. Around 1.6 million tonnes of carpet are disposed of in the EU every year, yet it is estimated that less than 3% is recycled; the rest is sent to landfill or incinerated. Similarly, just 5% of carpet is recycled in the US. On both sides of the Atlantic, this represents not only a major loss of valuable resources but also a wasted opportunity to reduce greenhouse gas emissions and dependency on fossil-fuel-derived virgin plastics, and to move the industry to a circular economy model that creates more jobs.

Our work

In 2018, this campaign focused on two main strategies: exploring the issue of toxic substances in carpets sold in the European and US markets, and promoting policy options for legislators to implement EPR schemes for the European and US carpet industries.

March 2018 saw the launch of a report by Anthesis Consulting, which found that over 50 toxic substances are potentially present in European carpets. *Detoxing carpets: Pathways towards safe and recyclable carpet in a truly circular economy* was launched in English by EPHA and the Health and Environment Alliance (HEAL), in Dutch by Recycling Netwerk, in German by Deutsche Umwelthilfe, and in French by HEAL and Women Engage for a Common Future France. The report attracted widespread attention across Europe in both mainstream and specialist media.

Detoxing Carpets was published in English, Dutch, French and German

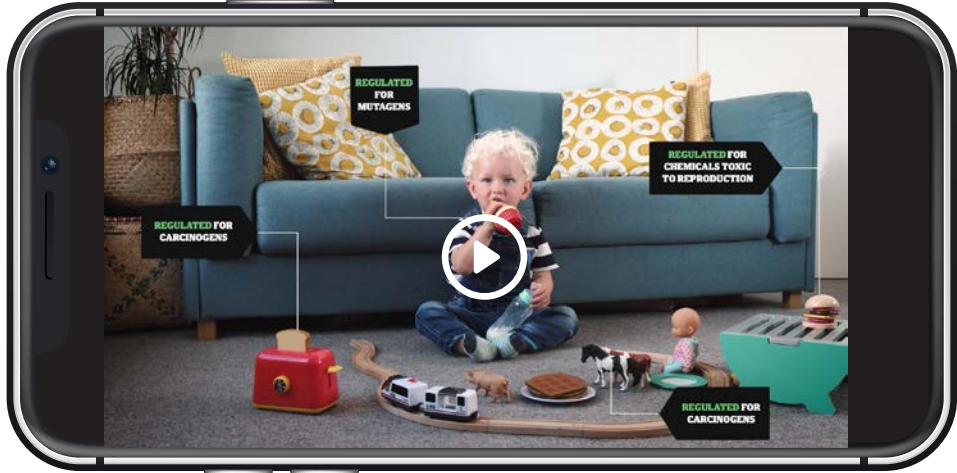
Between April and September, Changing Markets worked on a project with the Vrije Universiteit Amsterdam, Ecology Center (Michigan, US) and University of Notre Dame (Indiana, US) to investigate toxic substances in carpets sold by the six largest carpet manufacturers in the US and the seven largest manufacturers in the EU. Carpets were tested for a range of substances: phthalates; per- or polyfluoroalkyl substances (PFAS); isocyanates; antimicrobials; PAHs; Bisphenol A (BPA); flame retardants; nonylphenol; metal and non-metal elements, and total fluorine.

In October, the findings from the EU investigation were released in a report titled *Testing for toxics: How chemicals in European carpets are harming health and hindering circular economy*. This report revealed the presence of a number of hazardous substances in European carpets, including suspected carcinogens, endocrine disruptors and reprotoxics. In three of the carpets tested, no toxic substances were detected, indicating that toxic-free design is possible but now needs to be brought to scale. The report was accompanied by a short video highlighting the main findings.

In mid-December we launched *Testing carpet for toxics: Chemicals affecting human health and hindering the circular economy* in the US, in partnership with the Global Alliance for Incinerator Alternatives (GAIA) and the Ecology Center. The report presented the US findings from our investigation; most notably, the detection of PFAS substances in six of the 12 carpets tested, and phthalates in five. The report was shared widely with environmental NGOs, and its launch was supported on social media by Sierra Club, Safer States Coalition, Safer Chemicals and The Story of Stuff.

Outcomes and impacts

In 2018, this campaign continued to build on the momentum for circular economy models in both the US and Europe, while maintaining its commitment to moving the carpet industry towards improved carpet design. By highlighting the possible health risks posed by toxic substances in carpets, and explaining how these chemicals undermine efforts to increase recycling, we expanded the reach of the campaign.



This campaign film, used on social media, outlined key findings from our carpet investigation



French newspaper Libération published an article on toxics in carpets based on our report findings



Carpet companies joined the call for mandatory policies

Our reports generated media coverage in both the EU and the US, in both specialist and mainstream media outlets. These included international publications *Chemical Watch* and *Recycling Product News*, *Libération* and *Le Progrès* in France, *Het belang van Limburg* in Belgium (Flandres), and *Recycling Magazin* and *EUWID* in Germany.

Working with Eunomia Consulting & Research to develop a policy toolkit for increasing circularity in the EU carpet industry, we provided a blueprint for national governments to implement EPR schemes at a member-state level and to advocate for EU-wide legislation. Importantly, this toolkit and the need for mandatory policy measures have been publicly endorsed by some of the biggest carpet producers: Interface, Tarkett and DSM-Niaga. This represents a major step forward in the campaign, as it paves the way for EPR legislation in Europe.

In California, we continued to scrutinise the Carpet Stewardship Plan, put forward to the state's waste authority CalRecycle under carpet recycling bill AB 1158 by the industry alliance Carpet America Recovery Effort (CARE). In April and September, we sent letters to CalRecycle in conjunction with GAIA, Clean Water Action and Valley Improvement Projects, calling for CARE's 2018-22 plan to be disapproved due to its lack of ambition. In October, the plan was conditionally approved, subject to CARE fulfilling certain criteria by September 2019. We continue to call for improvements to the plan, including addressing carpet toxicity and recyclability, and ensuring that companies continue to ramp up their recycling efforts, especially carpet-to-carpet recycling.



"The time is ripe for a Circular Economy for carpets, but this will only happen if a mandatory approach with ambitious policies is adopted"

Zero Waste Europe, Chemical Watch (December 2018)

ChemicalWatch
GLOBAL RISK & REGULATION NEWS

Roadmap towards responsible viscose & modal fibre manufacturing

Dirty Fashion

The problem

Viscose is the third-most-used fibre in the fashion industry, after polyester and cotton. It is produced from wood pulp and is, in principle, biodegradable at the end of life, making it a potentially more sustainable alternative to other fabrics. However, most viscose on the market today is produced using heavily polluting processes. The fibre-production process is largely still reliant on a number of toxic chemicals - such as carbon disulphide, sodium hydroxide and sulphuric acid - which, if not managed properly, can be detrimental to the health of ecosystems and people.

Since the demand for viscose is expected to grow significantly over the coming years, it is important that the viscose industry takes steps now to clean up production, and to ensure any new production capacity coming onto the market produces viscose in a closed-loop system whereby chemicals used in the process are captured and reused.

Our work

Changing Markets' 2017 investigation into viscose factories across Asia - presented in our *Dirty Fashion* report - highlighted how inadequate chemical management and water treatment have been destroying aquatic life and agriculture and directly exposing workers and local people to harmful chemicals, leading to severe health problems. By establishing direct links between the factories investigated and a number of major European and North American



Dirty Fashion Revisited and the
Roadmap were both published in
February 2018

brands, the report also revealed that many fashion giants are buying from polluting viscose factories.

As a follow up to this report, in February 2018, Changing Markets provided an update on the situation on the ground at viscose-manufacturing plants in India and Indonesia, focusing on Aditya Birla Group, an Indian multibillion conglomerate and the biggest viscose manufacturer in the world.

Dirty Fashion revisited: Spotlight on a polluting viscose giant, published in February 2018, revealed that Aditya Birla Group, while keen to broadcast its sustainability credentials, was still not taking appropriate action to address the environmental damage and other supply-chain risks identified in the original *Dirty Fashion* report. Using a combination of first-hand witness accounts of the company's wrongdoing and independent laboratory testing, the report found that air and water pollution around production sites was still a serious threat to the local environment and the health of people living nearby.

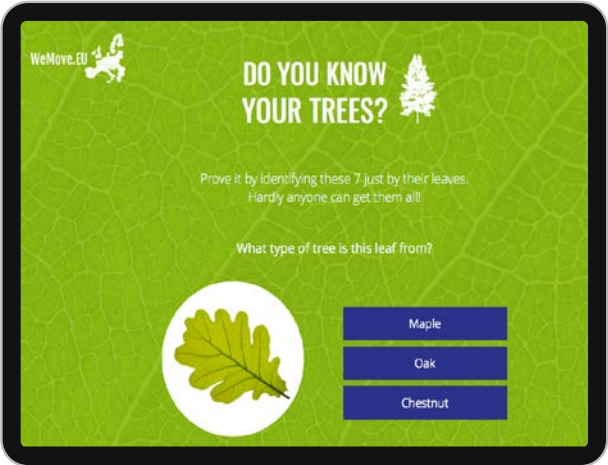
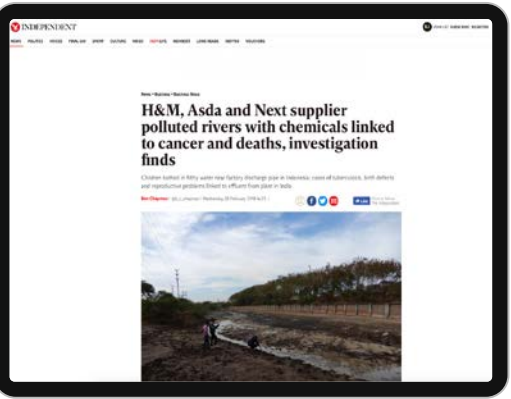
Alongside the report, we launched a *Roadmap towards responsible viscose and modal fibre manufacturing*. This document provides a blueprint for brands, retailers and producers to move towards a closed-loop manufacturing system, in which emission controls and chemical recovery rates are in line with best practices. At the time of the launch, five brands (ASOS, H&M, Inditex, M&S and Tesco) had signed up to the *Roadmap* and called on their suppliers to move towards closed-loop manufacturing by 2023-25.

In July 2018, *Dirty Fashion: On track for transformation* provided a one-year-on update to the first *Dirty Fashion* report. It looked at progress made by global apparel companies and viscose manufacturers in the transition towards responsibly produced viscose, analysing clothing brands' sourcing policies and transparency performance, as well as manufacturers' responsible production plans. The report concluded that, while much progress remains to be made, the tide is beginning to turn in favour of more responsible viscose production. At the time of the report launch, eight clothing companies had committed to the *Roadmap*. In addition, Aditya Birla Group admitted the wrongdoing exposed in our previous report, and committed significant investment to bring their production sites in line with our *Roadmap*.

To coincide with the launch of this report, our WeMove.EU petition (launched in 2017) extended its target from H&M and Inditex to a larger pool of fashion giants, calling on

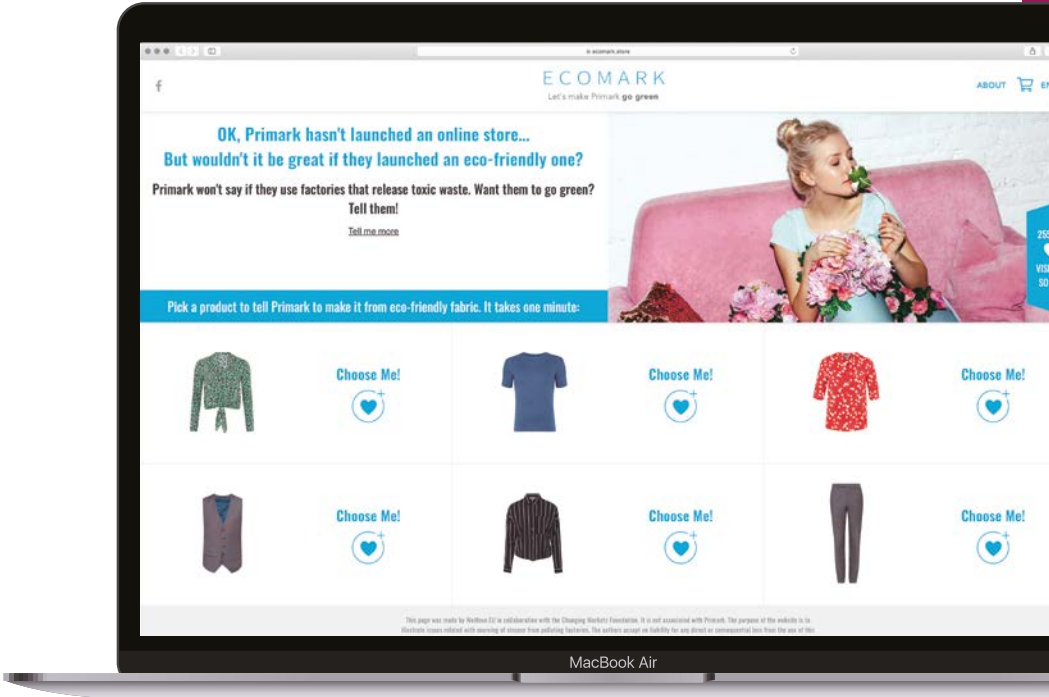


Our reports on viscose production were covered in the Daily Mail (above) and The Independent (below)



WeMove.EU launched a quiz calling on members of the public to contact their favourite brands and ask them to clean up their viscose supply chain

Parody Primark site encouraging the company to clean up its viscose supply chain



them to commit to a zero-pollution policy and concrete timeline, work with producers to transition to clean technologies and stop purchasing from producers that fail to comply. In addition, WeMove.EU launched a quiz, *Do you know your trees?*, which asked members of the public to take action by signing the petition and/or writing on the Facebook walls of several fashion brands and retailers asking them to commit to sustainable viscose production.

In December, WeMove.EU and Changing Markets also launched a parody Primark online shop, ECOMARK, to illustrate issues related to sourcing viscose from polluting factories and to push Primark to commit to cleaner viscose.

In November 2018, we highlighted the Chinese viscose sector in our report *Dirty Fashion: Spotlight on China* - Why the Chinese Collaboration for Sustainable Development of Viscose will not be able to deliver on its promise. This report looked at the sustainability initiative launched by ten of China's leading viscose manufacturers - the Chinese Collaboration for Sustainable Development of Viscose (CV) - and its *CV Roadmap*. It concluded that Chinese producers need to adopt a more ambitious approach to match action being taken by other global industry players.



Dirty Fashion: Spotlight on China was published in December 2018

Outcomes and impacts

Before the launch of this campaign, very little was known about the environmental impacts of viscose-fibre production or the supply-chain links between viscose factories and key brands and retailers. In 2018, the Dirty Fashion campaign kept the environmental challenges linked to viscose-fibre production on the fashion indus-

Highlights

The false promise of certification

In 2018, we investigated the merits of different certification schemes and voluntary sustainability initiatives in three sectors in which growing consumption and unsustainable sourcing have caused serious environmental and social problems. These sectors were palm oil, wild-caught fisheries and textiles (a sector in which we also had an active campaign on cleaning up the viscose supply chain).

In theory, certification is a good idea. It provides a quick and easy way for consumers to identify more responsibly produced products; incentivises companies to switch to more sustainable suppliers and production methods, in exchange for a price premium; and responds to consumer demand as the market for ethical products continues to grow.

However, our in-depth analysis of certification schemes revealed that, rather than accelerating positive change, the flood of such schemes has created confusion and is standing in the way of sustainability. Many of these schemes are being used as a cover, which makes it more difficult for NGOs and academics to question the sustainability of some products and companies. Governments are also increasingly using schemes as evidence of sustainability, relying on voluntary approaches driven by the private sector rather than implementing effective national and international legislation to solve environmental and social problems.

Our report, *The false promise of certification*, concluded that certification has lost its way and that its contribution to creating a more sustainable world is minute. Many schemes analysed were found to have lowered the bar for certifying products, in order to certify higher volumes, and often failed to provide greater transparency or to cover the whole supply chains of endorsed companies. Voluntary initiatives must therefore undergo significant reform, and the least ambitious schemes must be abolished, as they are leading to confusion and label shopping. The report highlighted the way forward for certification, which must be based on transparency, independence, a holistic approach with high traceability, and commitment to continuous improvement.

The report generated a large amount of media interest, with over 50 news stories in France, Germany, Spain, the UK and internationally. It also sparked responses from voluntary initiatives, which led to dialogue and, in some cases, improvements of the schemes.



try's agenda, and generated significant change in the industry.

The WeMove.EU petition gathered over 300,000 signatures. Together, the quiz and ECOMARK website were successful in driving more than 3,000 people to write on the Facebook walls of fashion brands including Primark, C&A and Mango.

As a result, eight high-street giants – ASOS, C&A, Esprit, H&M, Inditex, M&S, Next and Tesco – have committed to our *Roadmap*, sending a clear message to viscose manufacturers that they expect the industry to move to responsible viscose production by 2023–25. Throughout 2018, these companies updated their responsible sourcing policies in line with the *Roadmap*, and started publicly disclosing their viscose suppliers.

Two of the world's biggest viscose suppliers (Aditya Birla Group and Lenzing), which account for about 40% of global viscose production, have committed concrete investments (over €100 million each) to move to closed-loop systems of viscose production. In addition, CV is currently in discussions about setting a higher level of ambition, in line with the commitments of other global players. Lastly, Zero Discharge of Hazardous Chemicals has expanded its work to address the production of manmade cellulosic fibres in its guidelines for wastewater, sludge, waste and air emissions.



“Committing to the ambitions of the Changing Markets Roadmap Towards Responsible Viscose is crucial”

Inditex (Zara), Sourcing Journal



“Due diligence on environmental and social protection is not an optional luxury but a fundamental duty of brands, suppliers, and investors, wherever production takes place”

Clean Clothes Campaign, The Independent

The  INDEPENDENT



Milking it

The problem

Adequate nutrition during infancy is vital for improving child survival and promoting healthy growth and development. The first two years of a child's life are especially critical; poor nutrition at this stage increases the risk of illness and death, contributes to illness later in life and limits future potential.⁴ In this context, the WHO and UNICEF strongly recommend optimal breastfeeding, which is so critical that it could save the lives of over 820,000 children under the age of five years each year.⁵

Despite these recommendations, 92 million infants under six months of age - two out of three babies - currently rely on formula, either on its own or in combination with breastmilk and other foods, for their nutritional needs.⁶ Manufacturers of infant milks have a huge responsibility: ensuring they protect the nutritional status, health and wellbeing of these infants. It is critical that their products are safe, fed only to appropriate-aged infants, as nutritionally complete as possible and strictly informed by science.

Busting the myth of science-based formula was published in February 2018

However, our previous investigation⁷ into the existing range of infant milks sold by the four largest manufacturers (Abbott, Danone, Nestlé and Reckitt Benckiser) in 14 global markets concluded that product development and composition are primarily driven by marketing considerations, including the careful study of parents' preferences and concerns - not by science and health considerations. Yet, these products are often disguised as 'science-based', exploiting caregivers' desires to give their children 'the best' in order to sell more products.

The market for milk formulas is highly profitable; the industry is worth US \$47 billion, and its value is projected to grow by more than 50% in the run-up to 2020.⁸ Resilient to both the global financial crisis and massive food scandals, it is both a lucrative and stable industry with the highest growth market in Asia. It is estimated that companies spend around US \$4-6 billion on marketing and promoting milk formula each year⁹ - a figure comparable to the WHO's annual budget.



Our work

In February 2018, we launched *Milking it: Busting the myth of science-based formula*, in partnership with Globalization Monitor (a campaigning and public education organisation based in Hong Kong). This report explored in more detail the relationship between the marketing features and composition of some of Nestlé’s most common infant milks. We focused on Nestlé because it is the market leader, in terms of both sales volume and geographical reach, and because it takes pride in its scientific credentials as the ‘*the world’s leading nutrition, health and wellness company*’. The report therefore asked: ‘Is Nestlé’s commitment genuine, or is it really a marketing strategy?’

Milking it investigated the nutritional composition and claims of over 70 Nestlé infant milks sold in 40 different countries, and exposed a lack of scientific rationale behind its products. This was most noticeable when Nestlé’s decisions around its product formulation contradicted its own nutritional advice. For example, on product labels sold in Brazil and Hong Kong, the company advised parents against giving sucrose to infants, while some of its infant milks in South Africa were found to contain the ingredient. Similarly, some of Nestlé’s infant milks sold in Hong Kong were marketed as healthier for not having ‘*any added vanilla flavour or flavourings for baby’s good growth*’, yet several Nestlé products in Hong Kong, China and in South Africa were found to contain vanilla flavouring.

In addition, significant differences in the nutritional compositions of products carrying similar claims were identified, as were examples of products where similar compositions were linked to different claims. For example, several of Nestlé’s products that claimed to be ‘*closest to breast-milk*’ had major differences in their ingredients. As well as being prohibited by the WHO Marketing Code and subsequent resolutions, such a claim has little scientific rationale, as breastmilk contains many live substances that cannot be reproduced in a manufactured product.

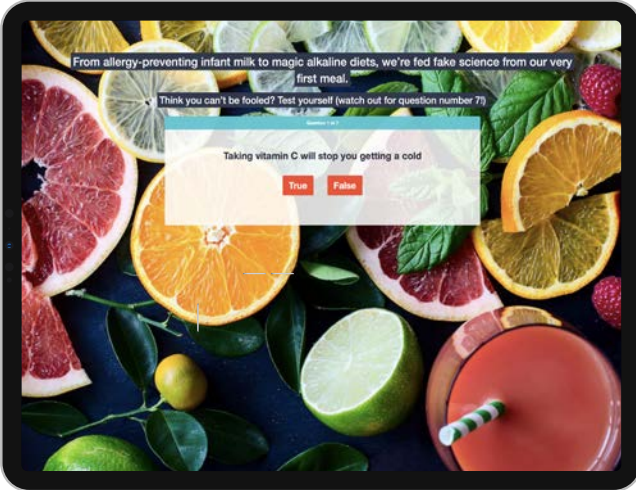
The report concluded that Nestlé is not driven by nutritional science but by a focus on profit and growth – at the expense of vulnerable infants and their caregivers. It called on the company to show leadership, to implement an independent review of its product range at the global level and to ensure its marketing aligns with the WHO Marketing Code and subsequent resolutions, including removing any comparisons to breastmilk.

Outcomes and impacts

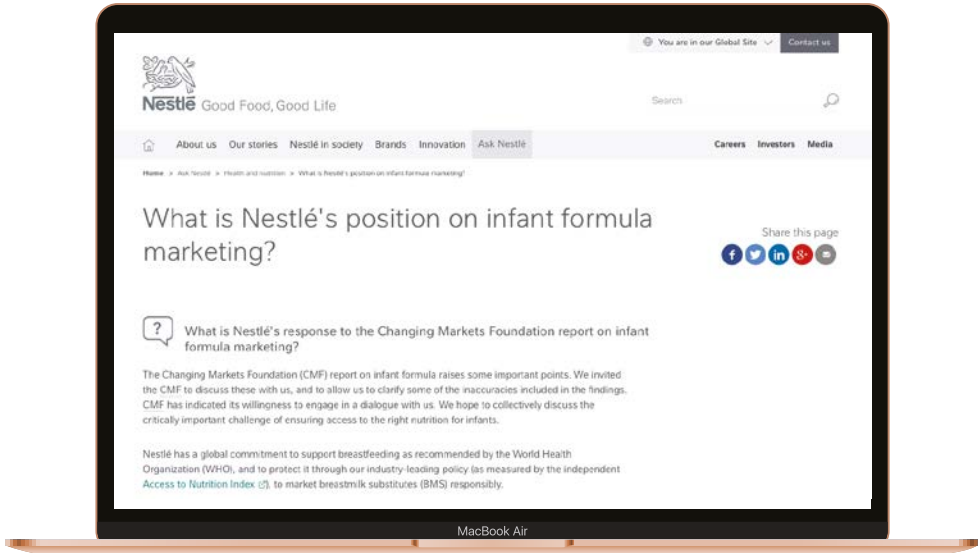
The findings of our report were widely reported by journalists in several countries – including in the UK (Reuters and *The Guardian*), the US (*CNBC*, *USA Weekly*), Continental Europe, Brazil, China, Hong Kong and South Africa – as well as several specialist media outlets covering health and nutrition news. The findings were also widely talked about on social



- | The Guardian ran an exclusive on our report in February 2018
- | SumOfUs launched a quiz to raise awareness of the campaign



Nestlé’s response



media and received a positive reception from many organisations in the area of infant nutrition. Supportive organisations published content pieces for their websites.

The general public also strongly supported our campaign. SumOfUs launched a petition calling for Nestlé to sell safe and nutritionally complete infant formula. In addition, SumOfUs launched a quiz to raise awareness of this issue, which encouraged people to challenge their knowledge of nutritional claims, write to Nestlé and support the petition. The petition reached a total of 120,000 signatures.

The campaign's pressure on Nestlé led to the company making specific commitments to reformulate their infant-formula product range in line with some of our recommendations, particularly those related to phasing out unhealthy ingredients, such as sucrose and flavourings.



“If the science is clear that an ingredient is safe and beneficial for babies then such ingredients should be in all products. If an ingredient is not healthy, such as sucrose, then it should be in no products. Nestlé’s inconsistency on this point calls into serious question whether it is committed to science, as it professes to be”

Changing Markets Foundation, The Guardian





Food fortification

The problem

Micronutrients are essential vitamins and minerals that people need to develop and maintain good health. The best way to get these nutrients is to have a diverse and healthy diet, but nutritious foods are not always accessible or affordable to all, particularly the most vulnerable groups. More than 2 billion people globally suffer from deficiencies of micronutrients, such as iron, iodine, folic acid and vitamin A, causing serious health and economic impacts.



Mexico suffers from a multiple burden of malnutrition: It has one of the highest obesity rates in the world,¹⁰ yet 1.6 million children still endure chronic malnutrition,¹¹ and micronutrient deficiencies continue to be an important public health concern.¹² Many people are eating too many calories but not getting enough nutrients; indeed, nine out of ten women in Mexico are iron-deficient, and anaemia is on the rise.^{13,14}

Food fortification – adding essential vitamins and minerals to commonly consumed foods, such as flour, oil and salt – is one complementary solution to this widespread problem; it is well-known and cost-effective, and it works. When food fortification is done well, it has huge potential to tackle micronutrient deficiencies. A good example is iodine, which was first added to salt in Switzerland and the US in the 1920s. More than 140 countries now have salt-iodisation programmes, and the practice has helped to almost eradicate goiter and intellectual disabilities associated with iodine deficiency.

Maize flour is a staple food in the diet of the Mexican population, representing 72% of the market share for grain consumed in Mexico. For this reason, the Mexican government first mandated flour fortification in 2000, and current legislation has been in place for almost a decade, requiring the fortification of both wheat and maize flours with iron, zinc, folic acid, niacin, thiamine and riboflavin.

Discussions around successful fortification primarily concentrate on technical considerations and persuading governments to enact legislation, but this legislation must be monitored and enforced to achieve the intended impact. Recent global research shows that, even where legislation exists, fewer than 50% of products are estimated to be fortified to the required standards.¹⁵ Media reports from Nigeria show that some industry players intentionally do not fortify their products so as to gain a competitive advantage, even though fortification only added 1–4% to the cost.¹⁶

Our work

Our first report, *Sorting the wheat from the chaff*, drew attention to the problem of micronutrient deficiencies in Mexico, showing how iron deficiency and anaemia are important public health concerns. The report highlighted significant gaps in the Mexican legislation, such as a lack of detail about how the law should be monitored and enforced. We also analysed available government

data, which showed a significant drop in compliance regarding fortification of maize flour with folic acid (100% to 33%), and omitted the analysis of other micronutrients added to maize flour, such as iron and zinc.

Our second report, *Ironing out the kinks*, looked further at whether maize and wheat flour companies in Mexico are using the recommended sources of iron to fortify their flours. Our analysis of companies' labels showed eight out of 12 major brands of maize flour are not using the recommended type of iron to fortify their products. This included companies with a total of 77% of the maize-flour market share (Harimasa, Maseca and San Blas), plus own brands from large supermarket chains, such as Walmart.



Many people in Mexico suffer from iron deficiencies



Our reports on this issue were published in September and November 2018

Given the serious health problems caused by micronutrient deficiencies, we concluded that the government and the industry needs to make a much stronger effort to hold industry accountable for fortifying responsibly. Effective fortification of flours in Mexico could have a significant impact on improving people's health.

Outcomes and impacts

The findings received attention from prominent journalists throughout Mexico, including coverage by national newspaper *Reforma* and national TV station *Televisa*, as well as several specialist outlets covering health, food and nutrition news, including the renowned Latin American food magazine *Énfasis Alimentación*.

The campaign was widely talked about on social media and by engaged participants at the Latin American Nutrition Congress in Guadalajara in November, attended by over 2,000 nutrition specialists. The campaign was also received positively by many organisations in the areas of food and nutrition, including El Poder del Consumidor, Un Kilo de Ayuda, the Food Fortification Initiative and 1000 Days.



Our reports received significant media coverage



“Companies can choose what type of iron they use in their [flour] products because the [fortification] requirements in the law are only voluntary and not mandatory, and so they are choosing the cheapest sources”

Proyecto AliMente, Zócalo (Mexico)

Zócalo
MAGAZINE

Highlights

Growing the good: The case for low-carbon transition in the food sector

In October 2018, as part of our ongoing interest in climate change and food systems, we published *Growing the good*, a report that looked at the case for low-carbon transition in the food sector. The report, co-signed by Compassion in World Farming and Mighty Earth, argued that the animal agriculture sector – both highly vulnerable to the effects of climate change and a key contributor to the problem – is at a crossroads. A perfect storm is approaching that will bring disruption and change, and the industry can either embrace this opportunity to change or resist and inevitably face various ecological constraints, including water and land availability.

The report lays out three reasons for transformation: climate, environmental and health. First, animal agriculture is responsible for around 16.5% of the world's greenhouse gas (GHG) emissions, and is the leading source of methane and nitrous oxide emissions. Emissions of the top 20 meat and dairy corporations are higher than the annual emissions of Germany. If the forecasts for growth in meat and dairy consumption materialise, there will be almost no room for any other sector within the total allowable carbon budget. Second, the sector is also extremely resource-intensive; it uses 70–80% of all agricultural land, and is one of the leading causes of biodiversity loss and water pollution. Third, excessive consumption of animal products in high-income countries is already two to three times higher than what is considered healthy, increasing the incidence of cancer, obesity, diabetes and heart disease.

The urgent need for change is compelling on all fronts, and momentum has been building over the past decade. Public awareness campaigns, in combination with changing market trends (especially among the younger generation), represent a huge opportunity for innovative companies. Innovation is on the rise, with a number of disruptive companies offering alternatives – from plant-based products to animal products grown from cell cultures.

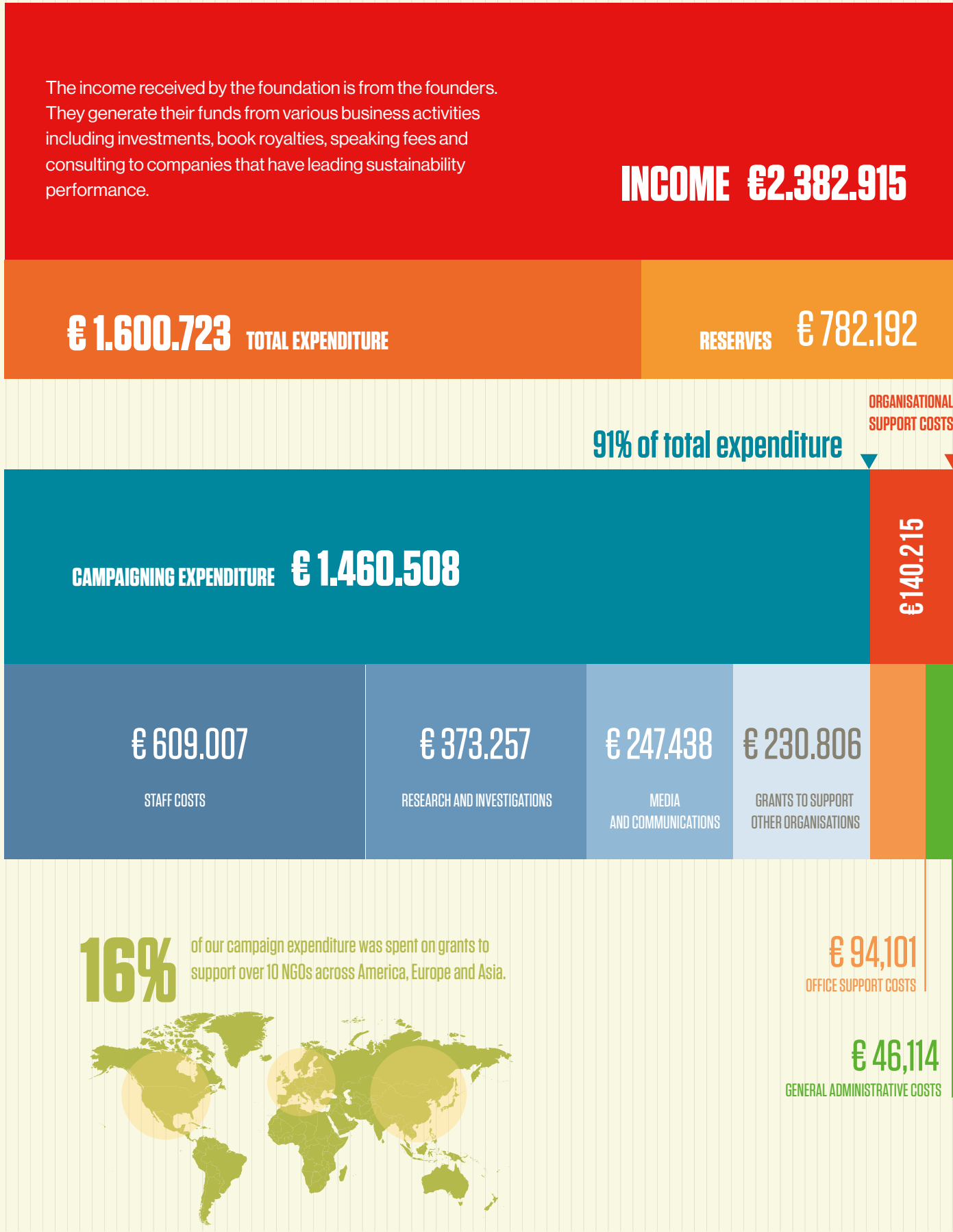
But while change is happening, it is not occurring with the urgency needed to stave off the environmental crises on the horizon. For this reason, the report highlighted the need for public policies to support a low-carbon transition in the food sector, similar to what is already happening in the energy and transport sectors. These policies should include ambitious climate targets that drive emission reductions in animal agriculture, in line with the Paris Agreement; shifting subsidies away from polluting-intensive animal farms; addressing negative externalities of animal agriculture; implementing dietary guidelines and fiscal policies that encourage a shift to healthier diets; and so on.

The report received a large amount media coverage, including a story from Reuters and an op-ed published on *Project Syndicate* (left). It also received substantial engagement on social media. Hopefully, it will inspire opinion leaders and the media to see this as an issue that goes beyond personal choice.



ANNUAL ACCOUNTS

THESE FINANCIAL ACCOUNTS COVER THE PERIOD JANUARY 2018 TO DECEMBER 2018





ALICE DELEMARE

Alice joined Changing Markets in April 2017 from Bond, the network for international development organisations, where she led a programme of work to build public support for tackling global poverty. An expert in campaigning and coalition-building, she has convened UK-wide coalitions on issues ranging from the sustainable development goals and the effectiveness of aid, to gender equality and electoral reform. At Changing Markets, Alice works on our nutrition and fortification campaigns.



NUŠA URBANČIČ

Nuša oversees strategy and implementation for all Changing Markets campaigns, investigations and media work. She joined Changing Markets in April 2015 from Brussels-based NGO Transport & Environment, where she worked as the Programme Manager of the Energy and Fuels programmes for over six years, advocating for more climate-friendly European policy and leading the fuels team. Born and raised in Slovenia, Nuša started her Brussels experience in Greenpeace's Renewable Energy team. Nuša has an MA in International Relations from the University of Ljubljana and an LLM in Human Rights from London University, which she completed part-time alongside working at Changing Markets.



RACHEL MULRENAN

Rachel joined the Changing Markets team in February 2017. Prior to this, she worked in the Public Relations and Advocacy Team at Girlguiding (a UK-based youth charity) and for The Week magazine (a current affairs weekly digest). She holds a first-class degree in History from the University of Manchester and a postgraduate qualification in Journalism from the National Council for the Training of Journalists. In 2018, Rachel worked on the viscose, AMR and carpet campaigns.



NATASHA HURLEY

Since joining the Changing Markets Foundation in 2015, Natasha has played a pivotal role in developing and implementing our campaigns to combat pollution in pharmaceutical and textiles supply chains. Prior to working at Changing Markets she spent four years at the Environmental Investigation Agency in London, where she was a campaigner on climate change. As EU Policy Advisor at Carbon Market Watch, she played an instrumental role in the campaign to ban environmentally unsound carbon offsets from the EU Emissions Trading System. Her previous roles included three years at a leading public affairs consultancy and a spell with the EC in Brussels.



SUZANNE SCHENK

As campaign advisor at Changing Markets, Suzanne develops and implements campaigns with a focus on the circular economy. She worked on the retailer resource efficiency campaign and is currently working on the carpet campaign. Suzanne joined the team in October 2015 from the European Climate Foundation, where she coordinated advocacy strategies for ambitious energy efficiency policies with NGOs across Europe. She built her expertise in connecting social and environmental issues and building coalitions. Her background is in European Studies and International Development.



IGNACIO VÁZQUEZ

Ignacio joined Changing Markets in May 2016, where he has worked as a campaign advisor on the acrylamide, nutrition and fortification campaigns. Prior to this, Ignacio worked in the development of UK policy on issues related to climate change, energy and the environment, including leading the reform of EU biofuels policy while on secondment to the EC between 2010 and 2014. Ignacio has a degree in Chemistry from the University of London and a master's degree in Film.



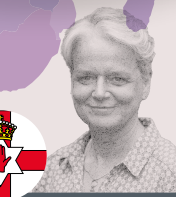
URŠKA TRUNK

Urška joined the Changing Markets team in January 2017 from the Brussels-based NGO Carbon Market Watch, where she worked as the Climate Finance Policy Officer advocating for more effective and accountable use of climate finance. Her background is in European policy and she holds a master's degree in European Politics and Policies from Katholieke Universiteit Leuven. At Changing Markets, Urška works as a campaign advisor on sustainable fashion, focusing on viscose production.



JOAKIM BERGMAN

Joakim studied law but soon after landed at Greenpeace, where he discovered his passion for campaigns. As Campaign Director of Greenpeace Sweden in the early 1990s, he was involved in some of the organisation's earliest innovations in market campaigns, including on its PVC campaign and its campaign against chlorine bleaching in the pulp and paper industry. He went on to various roles in Greenpeace, including CEO of Greenpeace Sweden, Deputy CEO of Greenpeace International and Board Member of Greenpeace USA and Central and Eastern Europe. In 1996, Joakim established and ran a solutions-focused market campaigning business in Sweden, advising NGOs and progressive companies.



ELAINE GIRVAN

Elaine looks after the financial and administration aspects of Changing Markets. She joined Changing Markets in July 2017, having previously worked as a systems accountant in a number of not-for-profit organisations, including the National Theatre and the Alzheimer's Society. As a trained accountant, she has spent much of her career helping and advising organisations on ways to improve their business and financial operations, as well as providing support as they carry out their day-to-day financial activities. After relocating to the Netherlands in 2014 Elaine took the opportunity to return to study; in February 2017 she completed an MSc in Sustainable Development, with a focus on Environmental Governance, at Utrecht University.



PAUL GILDING

Paul is an independent author, strategy advisor and entrepreneur for a sustainable economy. He has worked with the boards and executives of many leading global companies, including Unilever, BHP Billiton, DSM, Ford and DuPont, and is a widely recognised global authority on the economic and business implications of sustainability and climate change. He is a Fellow at the University of Cambridge's Institute for Sustainability Leadership, where he researches and teaches on the inevitable global economic transformation around sustainability.

OUR PEOPLE

10 PEOPLE
6 DIFFERENT NATIONALITIES
WORKING IN SIX COUNTRIES

LONDON
AMSTERDAM
STOCKHOLM
BERLIN
BRUSSELS

AUSTRALIA

Endnotes

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