



Key findings

# GLOBAL CHEMICALS OUTLOOK II

**FROM LEGACIES TO  
INNOVATIVE SOLUTIONS**

IMPLEMENTING THE 2030 AGENDA FOR  
SUSTAINABLE DEVELOPMENT



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The global goal to minimize adverse impacts of chemicals and waste will not be achieved by 2020.

Solutions exist, but more ambitious worldwide action by all stakeholders is urgently required.



# 1.

The size of the global chemicals industry exceeded United States dollars 5 trillion in 2017.

It is projected to double by 2030.



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Consumption and production are rapidly increasing in emerging economies.

Global supply chains, and the trade of chemicals and products, are becoming increasingly complex.



**#1 | Find out more!**

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# 2.

Driven by global megatrends, growth in chemical-intensive industry sectors (e.g. construction, agriculture, electronics) creates risks, but also...



...opportunities to advance sustainable consumption, production and product innovation.



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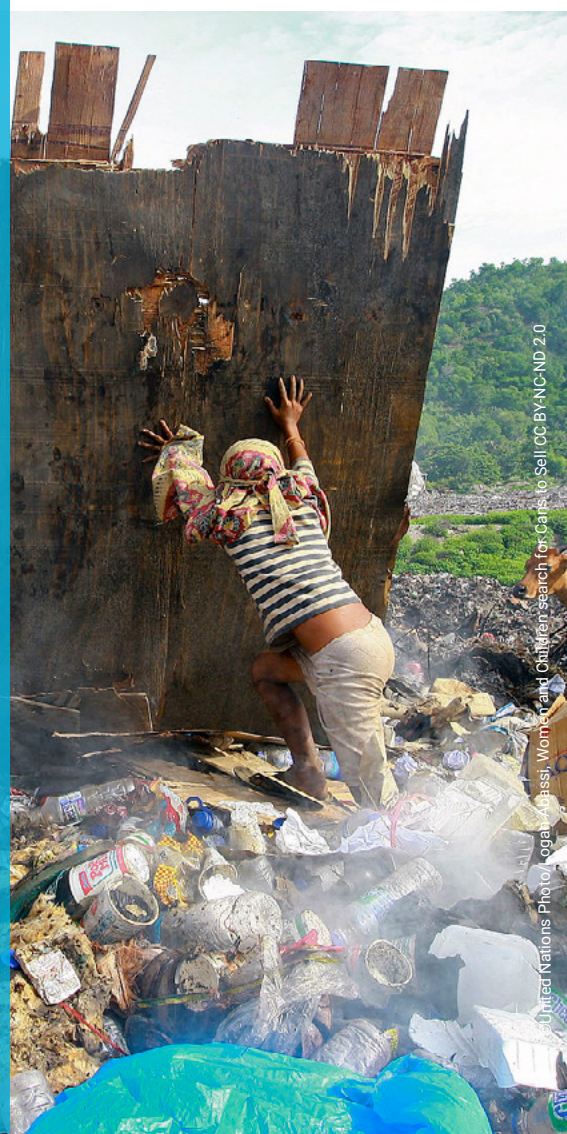
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# 3.

Hazardous chemicals and other pollutants (e.g. plastic waste and pharmaceutical pollutants) continue to be released in large quantities.



They are ubiquitous in humans and the environment and are accumulating in material stocks and products, highlighting the need to avoid future legacies through sustainable materials management and circular business models.



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# 4.

The benefits of action to minimize adverse impacts have been estimated in the high tens of billions of United States dollars annually.



The World Health Organization estimated the burden of disease from selected chemicals at 1.6 million lives in 2016 (this is likely to be an underestimate).

Chemical pollution also threatens a range of ecosystem services.



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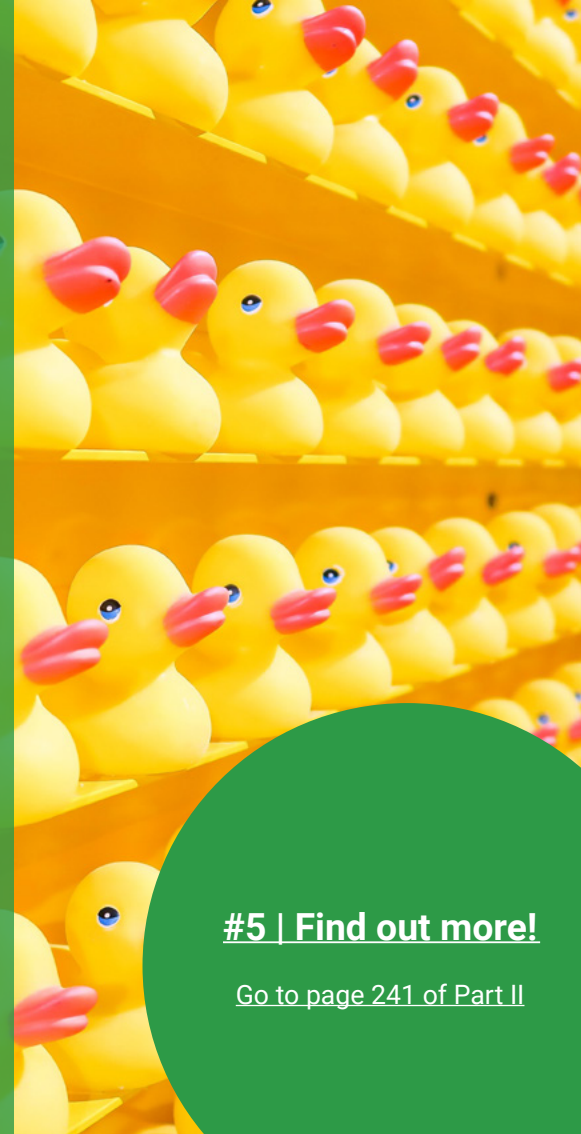
# 5.

International treaties and voluntary instruments have reduced the risks of some chemicals and wastes, but progress has been uneven and implementation gaps remain.



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As of 2018, more than 120 countries had not implemented the Globally Harmonized System of Classification and Labelling of Chemicals.



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# 6.

Addressing legislation and capacity gaps in developing countries and emerging economies remains a priority.

Also, resources have not matched needs.



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There are opportunities for new and innovative financing (e.g. through cost recovery and engagement of the financial sector).



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# 7.

Significant resources can be saved by sharing knowledge on chemical management instruments more widely, ...



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...and by enhancing mutual acceptance of approaches in areas ranging from chemical hazard assessment to alternatives assessment.



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# 8.

Frontrunner companies – from chemical producers to retailers – are introducing sustainable supply chain management, full material disclosure, risk reduction beyond compliance, and human rights-based policies.



However, widespread implementation of these initiatives has not yet been achieved.



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# 9.

Consumer demand, as well as green and sustainable chemistry education and innovation (e.g. through start-ups), are among the important drivers of change.



They can be scaled up through enabling policies, reaping the potential benefits of chemistry innovations for sustainable development.



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# 10.

Global knowledge gaps can be filled. This can be achieved, for example, by taking steps to harmonize research protocols, considering health or environmental impact information and...



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...harm caused to set and address priorities (e.g. emerging issues), and strengthening the science-policy interface through enhanced collaboration of scientists and decision-makers.



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Be the change  
**beyond 2020** for the  
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**#chemicals** and waste

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