# **Setting GHG emission targets**

Olga Trasuna, WECOOP law and policy expert

Julia Doktorova, WECOOP expert



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EU - Central Asia Cooperation on Water - Environment - Climate Change



## Content

- Why set emission targets?
- What are the key steps?
- Good practice/recommendations
- Useful resources and guidelines
- How to achieve reductions (very briefly)





## Once again: <u>Why businesses reduce GHG emissions?</u>





For the planet (and bright future) To be more competitive



Legal requirements



Demand for workforce



Trust and reputation



### Third party requirements



To save money



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Consumer and customer demand



## **Net-Zero Emissions from EU Heavy Industry?**

"In previously conservative sectors, we now see frontrunners that are really envisioning different production models and technologies – including zero-carbon aluminium, steel, gas, and automobiles. The phase when abatement of emissions from industry was considered impossible is over. Industry leaders are looking at totally disruptive technologies and visions."

Laurence Tubiana, CEO of the European Climate Foundation



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https://europeanclimate.org/resources/multiplepathways-can-take-eu-industries-to-a-clean-andprosperous-future/



# Why set targets?

Setting GHG reduction targets can:

- <u>Any robust business strategy</u> requires setting targets (revenues, sales, etc.) as well as tracking performance against those targets
- <u>Stimulate reduction</u> efforts at an organization and often leads to the identification of additional reduction opportunities.
- Helps to <u>secure senior management attention</u> and increase funding for internal GHG reduction projects.
- <u>Encourage</u> innovation, improve employee morale, and help in the recruiting and retention of qualified employees.





https://www.epa.gov/climateleadership/targetsetting#:~:text=Targets%20should%20be%20a%20clearly in%20one%20or%20several%20locations.



## How?



## Chapter 11: Setting GHG target



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https://ghgprotocol.org/sites/default/files/standards/gh g-protocol-revised.pdf



## Key steps

1	Steps	Comments
	1. Obtain senior management commitment	
	2. Decide on the target type	Set an absolute or intensity target? ABSOLUTE GOALS: Reduce absolute emissions over time (Example: reduce CO2 emissions by 25% from 1994 levels by 2010)INTENSITY GOAL: reduce the ratio of emissions to business metric over time (example: reduce CO2 emissions by 12% per tonne of clinker between 2000 and 2008)
	3. Decide on the target boundary	Which GHGs to include? Which direct and indirect emissions? Which geographical operations? Treat business types separately
	4. Choose the target base year	Use a fixed or rolling approach? Use a single or multi-year approach?
	5. Define the target completion date	Set a long- or short-term target?



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https://ghgprotocol.org/sites/default/files/standards/gh g-protocol-revised.pdf



## Key steps

Steps	Comments		
6. Define the length of the target commitment period	Set a one-year or multi-year commitment period?		
7. Decide on the use of offsets or credits			
8. Establish a target double counting policy	How to deal with double counting of reductions across companies? How does GHG trading affect target performance?		
<ol> <li>Decide on the target level</li> </ol>	What is business-as-usual? How far to go beyond that? How do all the above steps influence the decision?		
10. Track and report progress			





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https://ghgprotocol.org/sites/default/files/standards/gh g-protocol-revised.pdf



## **Good practice**

- Starts with assessment of current situation and identification of key sources
- Targets should include a base year and the target year.
- The <u>base year</u> is the year against which GHG reductions are tracked
- The year in which the target will be met should be 5 to 10 years from the base year
- Targets should be <u>aggressive</u>. An aggressive level of reduction is one that is beyond business as usual in an organization's sector (Science based)





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https://www.epa.gov/climateleadership/targetsetting#:~:text=Targets%20should%20be%20a%20clearlv in%20one%20or%20several%20locations.



## **Good practice**

- Targets should address all three emission scopes. Targets should include all scope 1 and 2 emissions and at least a portion of scope 3 emissions
- <u>Simple cost-benefit analysis is helpful</u>
- Declaring GHG reduction targets publicly is best practice
- Action plan and regular (at least annual?) control
- Part of management system environmental management, energy efficiency management etc. (Standards)







https://www.epa.gov/climateleadership/targetsetting#:~:text=Targets%20should%20be%20a%20clearlv in%20one%20or%20several%20locations.



### Sources and guidelines:



Science-based targets – in-line with limiting global warming to 1.5°C above pre-industrial levels



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https://sciencebasedtargets.org/set-a-target





### **Sector guidance**



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https://sciencebasedtargets.org/set-a-target



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SCIENCE BASED TARGETS

### STEEL SCIENCE-BASED TARGET SETTING GUIDANCE

Draft for Public Consultation

November 2022

# Sector guidance example

Developed by: SBTi through a technical partnership with ETC

Draft for public consultation November 2022 - not to be used for target validation







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https://sciencebasedtargets.org/set-a-target





Center for Corporate Climate Leadership Home

About the Center

#### **GHG Inventory Development Process &** Guidance

Inventory Guidance for Low Emitters

Scope 1 & Scope 2 Inventory Guidance

Scope 3 Inventory Guidance

GHG Emission Factors Hub

Inventory Management Plan Guidance

**Corporate GHG Inventorying and Target** Setting Self-Assessment

## **Corporate GHG Inventorying and Target Setting Self-Assessment**

The Corporate GHG Inventorying and Target Setting Self-Assessment is a technical tool designed to help companies evaluate their approaches to GHG inventorying and target-setting.

This self-assessment is responsive to companies' interests in benchmarking their GHG management approaches. Based on an analysis of over 500 publicly-reporting companies in 2017, this resource can be used by both leading companies and companies beginning to address their GHG emissions as an internal communication and management resource and a high-level benchmarking assessment. It aims to help them identify which inventorying and target-setting actions reflect common business practices today and validate additional inventorying and target-setting behaviors that position them for more cost-effective GHG emission reductions. Results from this self-assessment can also highlight how other companies develop their inventories and set GHG reduction targets.

- E Corporate GHG Inventorying and Target Setting Self-Assessment (pdf) (488.12 KB)
- Appendix: Development and Methodology (pdf) (638.14 KB)
- Insights on Corporate GHG Management: Inventorying and Target Setting (pdf) (192.79 KB)



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https://www.epa.gov/climateleadership/corporate-ghginventorying-and-target-setting-self-assessment



## How to achieve targets?

Directive 2010/75/EU on industrial emissions – requires application of BATs



European Commission > EIPPCB > BAT reference documents

### BAT reference documents

BAT reference documents (BREFs) represent the outcome of the "Sevilla process". The major of BREFs cover specific agro-industrial activities, such BREFs are referred to as "sectoral BREFs'. However, there are also an unimber of "horizontal BREFs' dealing with records-cutting issues such as energy efficiency, industrial cooling systems or emissions from storage with relevance for industrial manufacturing in general. A specific BREF was developed for the monitoring of emissions to air and water from installations under the Industrial Emissions Directive, which is referred to as the "ROM." The table below presents in alphabetical order a list of all BREFs drawn up to date.

### Show more V

Name	Code	Adopted/Published Document	Formal draft	Kick off meeting report	Status
Production of Chlor-alkali	CAK	BREE BATC (12 2013)			Published
Ceramic Manufacturing Industry	CER	BREF.(08.2007)		MR.(02.2021)	Review started
Production of Cement. Lime and Magnesium Oxide	CLM	BREF BATC (04 2013)			Published
Common Waste Water and Waste Gas TreatmentManapement.Systems in the Chemical Sector	CWW	BREE BATC (05.2016)			Published

## ЭКОЛОГИЧЕСКИЙ КОДЕКС РЕСПУБЛИКИ КАЗАХСТАН – requires application of BATs

IGTIG о нас медиа проекты ндт нтс закотики бяеен weennar цифровая площадка 💽 🔾

### Наилучшие доступные техники

Наилучшие доступные техники — это используемые и планируемые отраслевые технологии, техника и оборудование, обеспечивающие организационные и управленческие меры, направленные на снижение уровня негативного воздействия хозяйственной деятельности на окружающую среду до обеспечения целевых показателей качества окружающей среды

На сегодиящией деты Центром были **разработаны четыре Справочника по НДТ,** в которых предусмотреты достаточно **«зеленые требования» – и передены в** Министерство экологии с геологии и природных ресурсов Республики Казакстан в ноибре 2021 года, для последующего проведения процадуры упереждених Справочников Правительствови РКС

- «Сколание топлива на крупных установках в целях производства энергии»;
- «Переработка нефти и газа»;
- «Производство цемента и извести»;
- «Производство неорганических химических веществ».
- «Энергетическая эффективность при осуществления хотайственной и (или) иной девгельности» (данный справочник разработан на грантовые деньги с помощью Германского общества по международному сотрудничеству (GR) по энергоэффективности).

В ходе разработни вышиупомянутих Справочников, на постоянной основе проводились встречны с представителями государственных органов и общественностью. Всего в разработки четирек Справочников по НДТ было задействовано 335 специалистов, в 2021 году проведено 24 заседания, по рекультати которых все проекты Справочников были уперодены, на Комитете по наилучами доступным техникам 21 октября 2021 года.

Проекты Справочников по НДТ были расскотрены на научно-техническом совете, а также при разработке Справочников оказывалась международная экспертная поддержка (WECOOP – Проект Европейского совая «Европейский Сова». Центральная Азий: сотрудничество в области водныя ресурсов, окружающей среды и изменьник климата»; Федеральное агентство по окружающей среды Германии (UBA); Экспертный центр по вопросам заразнычная атмосферного воздука и изменений климата (СПЕМ).



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https://eippcb.jrc.ec.europa.eu/reference https://www.igtipc.org/ru/best-available-techniques

Archived reference documents

**BREFs under other policies** 

Click here to see the legend



# How to achieve targets?

# Standards and management systems? E.g. ISO 50001 Energy management system

ISO 50001 energy management system certificate can help to solve the following tasks:

- Formation of an effective plan for the use of energy resources;
- Ensuring transparency in the use of energy resources (for consumers, the state, business partners);
- Bringing the company's business to the unified world standards of energy security, to the reasonable use of the resources of our planet;
- Search for issues in business, identification of risks and "weak points" in the work of the enterprise, their monitoring, drawing up a program aimed at correcting and eliminating them;
- Creation of a plan for the financial costs of resources;
- Analysis of the work of the enterprise in terms of the use of resources, its improvement by introducing new rules of work, changing equipment, training personnel.





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This project is implemented by the consortium led by Stantec, with ELLE (Estonian, Latvian & Lithuanian Environment), ACTED, and Kommunal kredit Public Consulting as the consortium partners.

KOMMUNAL

## How to achieve targets?

## Sources and guidelines:



MATERIAL ECONOMICS INDUSTRIAL TRANSFORMATION 2050 Pathways to Net-Zero Emissions from EU Heavy Industry



Buildings 
 Industry 
 Transport 
 Electricity and heating 
 Other 
 Above zero
 Delow zero



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### • Circular Economy?

- Renewable energy?
- Technological innovation?
- Social and economic change?



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https://www.epa.gov/climateleadership/corporate-ghginventorying-and-target-setting-self-assessment https://ellenmacarthurfoundation.org/topics/circulareconomy-introduction/overview https://www.iea.org/reports/net-zero-by-2050

solar park roughly every day.

# Thank you!

Office 15 5 Dostyk str. Z05H9M1 Astana

www.wecoop.eu info@wecoop.eu f@vin@wecoopproject



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