

# Thinking and Acting for the Long-Term

Bridging the gap between economy  
and sustainability

An interview with Dipl.-Ing. André Podleisek  
Head of Corporate Sustainability, Mettler-Toledo International Inc.



**Given the rising world population and the demands for growth and prosperity, the natural foundations of life and resources are under pressure. Using and maintaining these sustainably, both commercially and ecologically, is increasingly a focus in terms of corporate behavior. The demand for environmentally friendly processes and products is the catalyst for innovative achievements and efficiency improvements within companies.**

As a global provider of precision instruments and services for various industrial sectors, Mettler-Toledo is rising to the challenge with the “GreenMT program”. q&more caught up with André Podleisek, head of the sustainability department, to discuss this.

*q&more: Hi André, as a global manufacturer of precision devices, what is the significance of the term “sustainability” for Mettler-Toledo and what does this have to do with success?*

AP: For Mettler-Toledo sustainability is an important strategy for long-term success. In order to be able to grow sustainably, in the truest sense of the word, we strive for corporate governance based on principles of sustainability which minimizes risk and embraces opportunities. From product development and manufacture, to the sale and shipment to our customers, right through to disposal at the end of product life: sustainability helps us make the right decisions for our customers, employees, suppliers, shareholders, and our social environment.

*The GreenMT program was introduced in 2010.*

*What is the exact objective with this and what are the central pillars of the GreenMT program?*

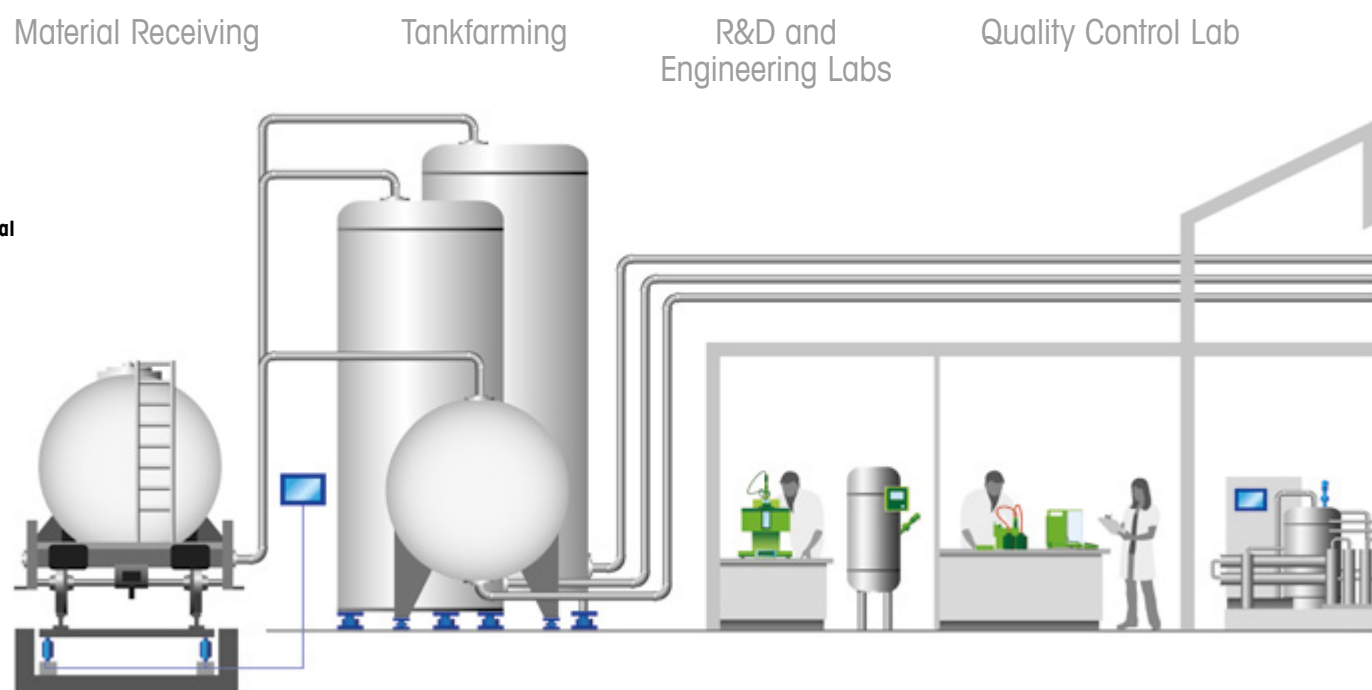
In short, GreenMT comprises four main points of focus: 1. “Energy efficiency” in the sense of energy-saving locations; 2. “Green fleets” for more economical vehicles in sales and service; 3. “Eco design” for the development of energy-efficient, resource-conserving products; and 4. “Resources” with a focus on improving our product packaging and using environmentally friendly refrigerants in our air conditioning systems.

*What activities have there been so far?*

One of the main objectives was to increase energy efficiency at the locations, thus reducing environmental impact and costs. The business units have implemented numerous opportunities for improvements in saving electrical energy and fossil fuels. More than 115 energy-saving projects implemented by the end of 2013 are saving over 3,300 megawatt hours worldwide every year. That equates to 2,100 metric tons of CO<sub>2</sub>. And new projects are being added all the time; especially designing lighting and air conditioning more efficiently, but also improving production processes together with lean management.

Optimizing the sales and service vehicle fleet is aimed at reducing fuel consumption and overall operating costs. Around half of our 13,100 employees work in sales and service, and a large part of CO<sub>2</sub> emissions is attributed to the fleet of vehicles. That’s why improving fuel efficiency and mileage is top of the agenda. In order to achieve this, all business units are obligated to use low-emission vehicles, whereby the lifecycle costs of the vehicles and their ability to support commercial and service requirements are considered at the same time. An emission limit of 130 grams of CO<sub>2</sub> per driven kilometer applies across Europe. Furthermore the use of alternative drive concepts such as natural gas and hybrid/electrical drives is being tested. In addition to needs-based and efficient vehicle selection, we have taken further measures, such as campaigns for fuel-efficient driving styles and route planning, proper loading and appropriate vehicle maintenance, as well as avoiding unnecessary journeys and cargo.

**The chemical value chain – potential for energy- and resource-efficient processes**



In product development we have introduced the EcoDesign guidelines, which aim to reduce the use of materials and energy and reduce waste production, both at our premises and when used by the customer. On the one hand, this is about producing products as energy-efficiently and resource-conservingly as possible. On the other, all our products are essentially designed to help the customer reduce material consumption and waste.

With efficient resource management in our commercial activities, we can reduce risks, costs, and environmental impacts. To do this we are improving our packaging, for example, and also the refrigerant in our refrigeration and air-conditioning systems. While the former involves more ecological and space-saving product and transport packaging, the latter accounts for better refrigerant with a smaller carbon footprint; for use in our climate chambers for the testing process of our instruments, for example.

The program is supplemented with local activities. One example is the replacement of our van at the Nänikon location with an electric vehicle and the installation of the relevant charging equipment. The charging station is available to employees and customers and – as with the building – is supplied with electricity from Swiss hydropower.

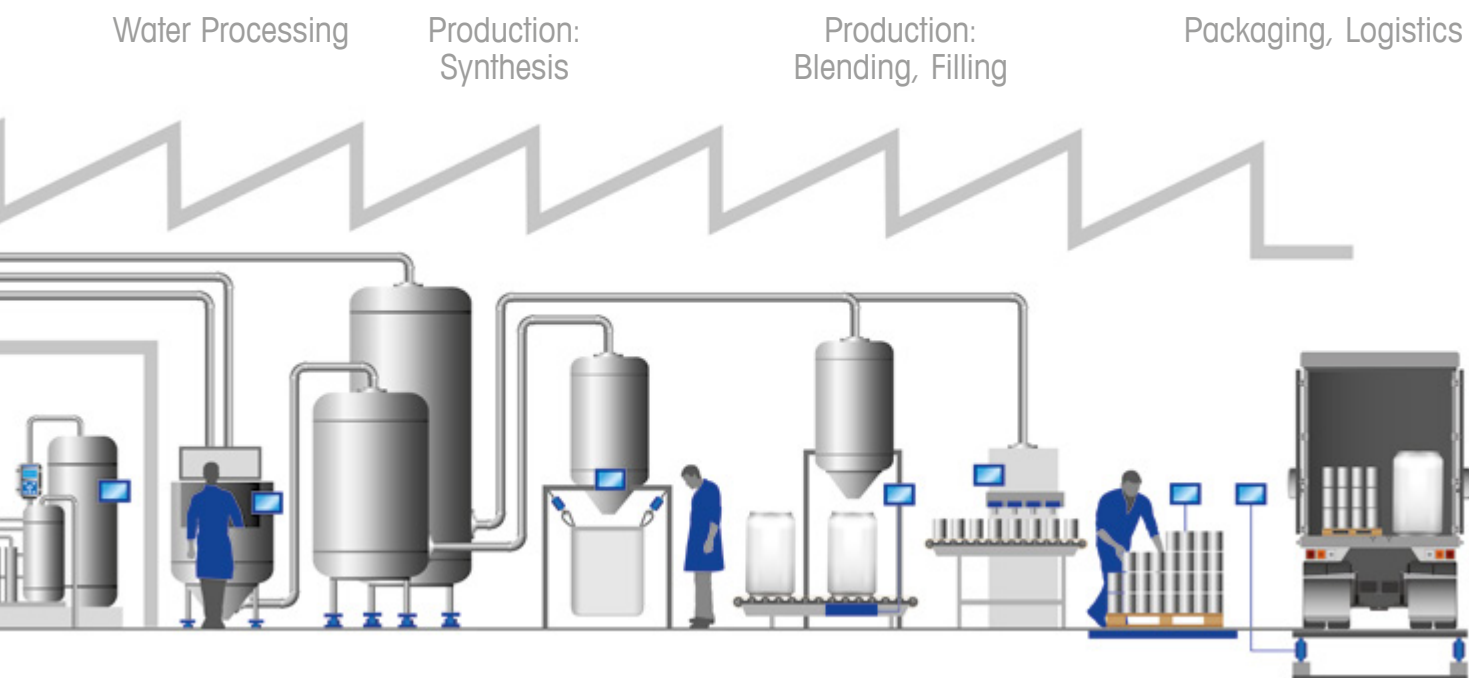
*You began the calculation of the global greenhouse gas footprint in 2010 – a big challenge given the company's global presence and variety of products. How did you go about this problem and what are the conclusions?*

Energy-efficiency is a key element for reducing our greenhouse gas emissions. We have therefore introduced worldwide energy monitoring to calculate our global carbon footprint. The energy-efficiency assessments of our largest locations provided us with clues as to the most critical areas of activity. We are currently expanding the energy-efficiency program to all locations. With the company-wide exchange of examples of best-practice and pilot projects, we are supporting our business units in identifying and implementing additional improvements. In addition to the incentive for internal competition, this exchange also leads to better awareness of the many activities in both large and small locations.

With all activities a clear conviction amongst company management that sustainability is important for the long-term growth of the company is advantageous. It also helps that our products are designed for longevity, precision, and reliability. That shapes our entire thinking, and the step toward broadening the principle of sustainability is only logical.

*You produced the first sustainability report based on the requirements of the Global Reporting Initiative (GRI) in 2011, and since then the new Sustainability Report 2014 has appeared. What was the motivation behind this and what are the advantages of it?*

The sustainability report based on the latest GRI G4 standard helped us to identify the fundamental aspects of sustainability for the company and to report on them in terms of the main points of focus. By means of this





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so-called materiality assessment we have considered the significant ecological, environmental, and social impacts we have on the value chain and aligned these with the requirements of our employees, customers, investors, public bodies, and other interest groups. Based on this process structured around the GRI G4, we were also better able to understand internally where we are at and which challenges are still ahead of us. At the same time, the sustainability report allows us to respond to customer queries, for example, quickly and specifically, because it already answers the most frequent questions and, where possible, substantiates them with current data and graphs.

*Let us take a look at the research and analysis lab, one of the main areas of your company. In the pharmaceutical and life science sector in particular, national and international regulations and GxP requirements play a central role. Where do you see the potential for sustainability here?*

There are many approaches here for increasing sustainability in the lab, such as the defining of methods, the selection of equipment, and the conducting of analyses.

Firstly, it is important to conduct the required analyses with reliable processes and resource consumption which is as low as possible. For each method, optimum accuracy, reproducibility, and reliability of the measuring devices are key in this regard to avoid out-of-specification results. In addition, a risk-based routine test and calibration concept is important for ensuring measurement accuracy that meets the requirements. Good Weighing Practice (GWP®), a global weighing standard, is a scientific method for selecting, operating, and calibrating weighing systems which is independent of manufacturers. GWP®, together with the two modules GWP® Recommendation for the ideal selection of scales and GWP® Verification for the certification of weighing processes, can ensure that weighing results are reproducible and can be established in compliance with all current quality standards.

The second aspect is the selection of energy- and resource-efficient analysis equipment. Examples of this are EasyMax, one of the new generation of reactors for synthesis labs and synthetic organic chemistry, or the portable Seven2Go measuring device for pH, ion, and ORP applications (see information box).

*In addition to CO<sub>2</sub> emissions, there is also a responsibility to future generations in terms of the exploitation of resources and nature. What contribution can a technology company like Mettler-Toledo make in this regard?*

The efficient use of resources is an important issue both now and for the future, and Mettler-Toledo is supporting its customers in designing and implementing resource-efficient processes. As explained previously in relation to the lab, accuracy, reproducibility, and reliability are key points here. This applies to production in the same way, where precise weighing and measuring help to ensure that the quality is right, and reprocessing or disposing of batches is avoided.

Mettler-Toledo is also heavily involved in passing on knowledge for research and application through training, webinars, guides, and white papers. I would like to offer the issue of food safety as an example: several thousand people have participated in our webinars and more than 30,000 copies of our guide on food safety and product conformity have been distributed.

A key contribution to sustainability and resource efficiency is definitely the cooperation with our customers – helping them to use their processes as efficiently and effectively as possible and to increase quality and productivity with our knowledge and solutions.

Ultimately, the aim of GreenMT is to support the saving of energy and resources – both in our company and for our customers – and to enable sustainable business, today and in the future.

**Thanks for sparing us your time, André.**

■ [www.mt.com/sustainability](http://www.mt.com/sustainability)

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(Claudia Schiller conducted the discussion for q&more.)

## Global Reporting Initiative

The Global Reporting Initiative (GRI) develops guidelines for the creation of sustainability reports of large companies, small and medium-sized enterprises (SMEs), governments, and NGOs in a participative process. It was initiated in 1997 by the Coalition of Environmentally Responsible Economies (CERES) in partnership with the UN Environment Programme (UNEP). The GRI guidelines have established themselves as the international standard for sustainability reporting.

■ [www.globalreporting.org](http://www.globalreporting.org)

## Green action

### Examples from the GreenMT program

#### ■ Energy-efficient climatic chambers

Weighing instruments must go through a testing process in a special climate chamber to restrict to a minimum any effects of temperature changes on instrument precision. However, these chambers which are important to the test process are noted for having high power consumption. They account for almost 15 % of the total energy consumption at Mettler-Toledo in Greifensee and Nänikon in Switzerland. By reprogramming and optimizing energy flows, we were able to cut energy consumption by more than 40 %. A second project shortened the cycle time of the adjustment process, which reduces the energy consumption per cycle.



#### ■ Energy kaizen in China

Following an energy consumption analysis at one of our production locations in Changzhou in China, we took actions to make the process more efficient by optimizing process capacity, improved production line setup, and replacing the continuous curing oven. We made further improvements to air conditioning and lighting throughout the buildings. Motivated by this success, our Chinese GreenMT team pressed on with its efforts and were able to reduce energy consumption by 1 million kilowatt hours.



#### ■ Reduced chemical consumption in the synthesis lab

EasyMax is a new generation of reactor for synthesis labs and synthetic organic chemistry. This single, self-contained box with a built-in, solid-state thermostat replaces the traditional, round-bottom flask, increases productivity, and is easy to use. Fewer reagents and solvents are required. This means costs are reduced and potential safety risks are minimized at the same time.



#### ■ Numerous energy-saving functions

Seven2Go is a portable measuring device for pH, ion, and ORP applications. The easy-to-read display and intuitive operation help prevent reading and operating faults, and the possibility to use rechargeable batteries, combined with numerous energy-saving functions, ensures lengthy mobile use with low power consumption.

