

Committed to Using Our Energy in the Right Way

Working for a Future of Sustainable Development

In September of 2015, at a historic United Nations Summit, world leaders adopted 17 Sustainable Development Goals (SDGs). Over the next 15 years, countries around the world will mobilize efforts to end all forms of poverty, fight inequalities, and address climate change¹.

This international effort is critically important for the future of our planet. For example, unless climate change is addressed, the global average surface temperature is expected to increase by up to 4.8°C (8.64°F) by the year 2100. If this is allowed to happen, hurricanes and other storms would become stronger, floods and droughts would become more common, and communicable infectious diseases such as malaria will spread².

If global warming keeps increasing...



It's not only countries that are working to achieve the SDGs. The United Nations has partnered with organizations ranging from the Cannes Festival of Creativity to the makers of the "Angry Birds" movie, with the intention of spreading the word about sustainable development and achieving specific solutions for the individual goals³. An increasing number of key stakeholders are expressing a preference for partnering with businesses that actively support the SDGs.

This is one reason why a number of large corporations have voluntarily committed to helping achieve the SDGs. <u>Ajinomoto Co., Inc.</u> ("Ajinomoto Co.") is proud to be one of them. There are several reasons that we have become deeply involved in this endeavor. First of all, we are an international organization with a large footprint, operating in 30 countries, and we are in the business of converting natural resources into food products on a large scale. Therefore, we feel we are in a position to make a tangible, positive difference for the world. And secondly, we simply feel it's the right thing to do.

One area that we focus on very specifically is renewable energy, which is essential for the sustainability of our planet and resources. Using renewable energy helps to achieve a number of the SDGs, especially:





Case Study: Ayutthaya Factory, AJINOMOTO CO., (THAILAND) LTD.

In April, 2016, AJINOMOTO CO., (THAILAND) LTD. introduced a biomass cogeneration system at its Ayutthaya Factory in Thailand. A cogeneration system uses a heat source to generate required electricity and steam—the question, of course, is how ecologically friendly the fuel is. In the Ayutthaya system, rice husks are used as the fuel.

The amount of CO_2 absorbed by plants as they grow is roughly the same as the amount they emit when they are burned for fuel. In other words, using plants as biofuel is "carbon-neutral".

By converting to biomass fuel from fossil fuels, the factory was able to achieve a reduction of annual CO₂ emissions of approximately 59,000 tons. In addition, the factory was able to replace a portion of its purchased power with power generated on-site, which both reduced energy costs and increases the ability to keep the factory running in the case of power failure.

One result of the implementation of the biomass cogeneration system is that AJINOMOTO CO., (THAILAND) LTD. now controls all aspects of its own fuel production, from obtaining the rice husks to effectively utilizing the resulting incinerated ash⁴. This is a prime example of our commitment to decreasing the use of finite natural resources, decreasing pollution, and promoting the success of local residents and businesses.

Ayutthaya Factory, Thailand



Implementing a Circular Economy on a Global Scale

A traditional linear economy creates a lot of waste. Basically, the process is that a thing is made, the thing is used, and then the thing is disposed.

In contrast, a circular economy keeps resources in use for as long as possible, extracting the maximum value possible, and then recovering and regenerating resources from the products once their useful life is finished in order to create new products and materials⁴.

Linear versus circular economy



Ajinomoto Co. is committed to implementing a circular economy on a global scale, in the many countries in which we work and do business. We do this by specifically focusing on reduction of waste and disposal, recycling, sharing, and conserving the environment.

Case Study: AJINOMOTO DO BRASIL INDÚSTRIA E COMÉRCIO DE ALIMENTOS LTDA.

At AJINOMOTO DO BRASIL INDÚSTRIA E COMÉRCIO DE ALIMENTOS LTDA., ("AJINOMOTO DO BRASIL") value generation and sustainability are central to all of our activities. For example, the sugarcane that is used as the fundamental raw material to produce the umami seasoning *AJI-NO-MOTO*[®] is fully exploited at every step in the process, and fertilizers are created as a

Eat Well, Live Well.



co-product of amino acid production. These fertilizers are resupplied to local farms, yielding a diverse set of crops that includes tomatoes, grapes, coffee beans, and of course, more sugarcane.

In an initiative similar to the one in Thailand, the Ajinomoto Group in Brazil installed biomass boilers in three of its factories located in the interior of São Paulo—Laranjal Paulista, Limeira, and Pederneiras. As a result, in the period between April 2016 and March 2017, CO₂ emissions were reduced by 41% to a figure close to zero. In addition, they supply more than 80% of the demands of industrial processes with lower cost than fossil fuels, while reducing greenhouse gas emissions to practically zero.

Laranjal Paulista Factory, Brazil



AJINOMOTO DO BRASIL's commitment to the environment doesn't stop there. Through internal education and cooperation around "The 3 R's" reduce, reuse, and recycle—they also diminished water consumption by 42%. That's the equivalent of five Olympic swimming pools of fresh water per day.

A Continuing Commitment

Biomass boilers are operating in ten of our factories around the world so far. Our goal is to have a 50% renewable energy ratio across all of our operations, including our 108 factories, by the year 2030. AJINOMOTO VIETNAM CO., LTD. factory that uses biomass boilers to convert rice husks into energy, which can reduce CO₂ emissions by 50%



We take our responsibilities to our customers, our employees, the local communities in which we operate, and the Earth itself. We will continue to strive to achieve the United Nations' SDGs through activities like the ones described above into the future.

About Ajinomoto Co., Inc.

Ajinomoto Co. is a global manufacturer of high-quality seasonings, processed foods, beverages, amino acids, pharmaceuticals and specialty chemicals. For many decades Ajinomoto Co. has contributed to food culture and human health through wide-ranging application of amino acid technologies. Today, the company is becoming increasingly involved with solutions for improved food resources, human health and global sustainability. Founded in 1909 and now operating in 31 countries and regions, Ajinomoto Co. had net sales of JPY 1,091.1 billion (USD 10.07 billion) in fiscal 2016. For more about Ajinomoto Co. (TYO : 2802) and the back issues of the newsletters, visit <u>www.ajinomoto.com</u>.

For further information or references and literature support of any information contained in this newsletter, please contact Ajinomoto Co., Inc. Global Communications Department: <u>ajigcd_newsletter@ajinomoto.com</u>.

References:

- 1. "The Sustainable Development Agenda," United Nations, http://www.un.org/sustainabledevelopment/development-agenda/
- "Effects of Global Warming," National Geographic, https://www.nationalgeographic.com/environment/global-warming/global-warming-effects/
- 3. "Partnerships for the SDGs," United Nations,
- https://sustainabledevelopment.un.org/partnerships/
- 4. Data on file.