

DRAFT

International Bottled Water Association
Environmental Sustainability Committee

Bottled Water Industry Sustainability Goals

The bottled water industry will strive to be a model of environmental stewardship and social responsibility by incorporating the ideals of sustainability into every facet of bottled water production and distribution by providing a safe, healthy and sustainable product for consumers.

I. **Focus points**

- A. **Energy Conservation**- Focus on reducing our CO2 (and equivalents) emissions of plant operations and delivery vehicles, by decreasing the amount of energy required per unit of production and/or per delivered unit.
- B. **Water Conservation/Stewardship**- Focus on practical water management measures that can improve water use efficiency and reduce the amount of water required per unit of production.
- C. **Sustainable Packaging efforts**- Following the “5 R’s”- **Restore** by supporting the use of materials that reduce or improve our use of natural resources; **Respect** what we have by examining all the impacts that packaging may have; **Reduce** the amount of materials, layers of packaging, weight of package, fuel used in transport, etc.; **Reuse** something that’s already been made, and make your package easy and desirable to reuse; and **Recover** the materials used through enhanced recycling for operations and push for consumer participation (<http://www.dynamicgraphics.com/dgm/Article/28834/>). Where possible communicate the results of these activities in a format that is consistent with energy conservation and/or water conservation practices.
- D. **Waste Management**- Reduce waste in operations with the ultimate goal of a net zero waste per unit of production. Focus on repurposing/recycling and reducing dependence on disposables when possible.
- E. **Sustainability Education**- Be a leader in sustainability-related research and dissemination of information on sustainability to IBWA members, media and bottled water consumers.

- II. **2020 Goals and Achievements**- Setting goals for IBWA membership participation—**2020 Goals** can be set by each individual company as a result of IBWA encouragement and guidance.
- A. IBWA will continue to focus on means of developing ways to help members increase their sustainability efforts. Through research of other industries and individual companies efforts, IBWA understands that sustainability comes from:
1. ***Quick wins*** — changes that can be implemented almost immediately, such as in the area of energy management
 2. ***Innovation projects*** — ideas requiring development of new technology or business models, such as renewable energy generation
 3. ***System changers*** — opportunities involving regulatory or system-wide changes
- B. The Association will focus on helping IBWA members in all these areas in order to help increase the number of companies who reach the IBWA goals. Members should focus on the following measures to help the overall IBWA sustainability effort.
1. Reduce energy consumption per unit of production
 2. Reduce water use per unit of production
 3. Reduce packaging per unit of production
 4. Reduce waste per unit of production
- III. **Proposed Voluntary Goals for IBWA members across all types of businesses (bottlers using the 2008 LCI as a baseline)**
- A. **Reduction of Green House Gas Emissions by 20% (average value) - production** (water source maintenance) by **15%**, **water processing** by **15%**, **packaging** by **25%**, and **transportation** by **25%**. Focus on reduction of green house gas emissions can translate into decreased energy consumption, water use and solid waste production. Even if it is projected that the goals will not be met entirely, there is still value in the probable reduction percentage.
- B. **Reduction of solid waste generation by 97%** in offices, delivery branches and plant facilities.

- C. **Reduction of Water Use Ratio** (gallon of water used/gallon of beverage produced) **OR 20% improvement in water efficiency** (U.S. GreenGov Initiative.) once IBWA has data on industry water footprint—this data is needed to set a baseline.

IV. Suggested Methods For Sustainability Efforts/Reaching 2020 IBWA Sustainability Goals

A. **Reduction of Green House Gas Emissions/Energy Use**

1. Consider using of railway transport for products and materials
2. Further reducing the weight of bottles
3. Use of more recycled plastic (rPET) in the production of bottles
4. Conversion of equipment to efficient Energy Star platform OR investing in high efficiency equipment to reduce energy consumption
5. Use of electric heavy duty machinery (e.g. forklifts)
6. Conversions from injection molding to compression molding (some have saved over 15% in power consumption by doing so)
7. Enforcement of office lights and computers being shut off at night and main offices being reduced to minimal lighting
8. Investing in HOD vehicle upgrades to a more fuel efficient fleet
9. Use of high efficiency lighting technology in all new installations **OR** replacement lighting where needed
10. Co-generation cooling/heating of plant environment with ground water therms
11. Increase use of Public Utility Assessment Programs for assessment of facility energy waste reduction projects and identification on potential tax credit projects

B. **Reduction of Solid Waste Generation**

1. Inventing and studying new materials and new uses for them (e.g. compactable packaging, biodegradable packaging, etc.)
2. Research and support of programs for raising recycling awareness among consumers
3. Having all production scrap accumulation and segregation done internally and then distributed to a plastics recycler where it can be reground and redistributed for use
4. Recycle all corrugated cardboard, paper, plastic single-serve containers, and cans in all plants and branches
5. Recycling all oils and hydraulic fluids by licensed vendors

C. **Reduction of Water Use Ratio**

1. Support and participation in programs that protect water resources and biodiversity
2. Focus on onsite water reduction/improving bottling efficiency
3. Reduction of water and chemicals in the line cleaning process (automated programming of the Clean-In-Place (CIP) process)
4. Consider replacing the water used to rinse out bottles with sterilized air (this has led to a 10 percent reduction in water consumption for some bottlers).
5. Consideration of water reuse (reverse osmosis). One must take into account plant location—in areas of water scarcity versus water abundance and the relation to CO2 impact.