



EXECUTIVE ORDER NO. 12-05

**FOSTERING ENVIRONMENTALLY-FRIENDLY PURCHASING AND
PRODUCT DESIGN**

Emerging market opportunities driven by consumer demand and changing regulations in the U.S. and abroad are creating a shift to products that are designed to be safe for people and the environment. Building materials, electronics, apparel and cleaning products are just some of the products that are increasingly being designed to eliminate or significantly reduce the use of toxic materials. Businesses that use safer, cleaner alternatives to toxic chemicals and processes will be in the best position to capture this growing market.

Fostering innovation and encouraging new business development through a coordinated effort in Oregon will help firms take advantage of emerging market opportunities. Thoughtful application of green chemistry principles, aligned with an over-arching toxic reduction strategy, can foster a cleaner environment that will help all Oregonians live healthy and productive lives, free of illness and disease. Green chemistry is based on a philosophy of encouraging the design of products and processes to minimize the use and generation of toxic substances.

By encouraging the design and use of chemicals and materials that are benign by design and more sustainable throughout their lifecycle, Oregon and its business community will boost our state economy and lower the cost of health care in the future. Scientific studies show that chemical exposures can lead to or contribute to chronic disease.

Oregon universities are already recognized leaders in green chemistry research and education. We are also home to a number of businesses that are early adopters of green chemistry. As an added benefit, Oregon's agricultural and forest resources can serve as feedstocks for non-toxic, bio-based chemicals and products, supporting the creation and retention of jobs in rural Oregon, and economic development for rural counties.

By fostering the development of the next generation of green materials, Oregon has the opportunity to demonstrate national leadership and a commitment to the quality of life that Oregonians value. Ultimately, successful innovation will create good jobs that are safer for workers and offer a high quality of life for our communities, enhancing opportunities and resources for future generations. By applying green chemistry, Oregon will be able to address some of our most significant sustainability related challenges head on. In doing so, we will be supporting the health and well-being of our citizens and protecting the resiliency of the ecosystems we depend upon.



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To further catalyze Oregon's efforts to develop and use safer, more efficient products and processes, this Executive Order establishes an Oregon Green Chemistry Innovation Initiative (the "Initiative"). This Initiative will help ensure the long-term competitiveness of Oregon in the global market for greener technologies. To achieve this will require collaboration among agencies and businesses, universities and non-governmental organizations. The Initiative includes actions that represent the most effective and efficient ways for state government to foster this type of innovation.

NOW THEREFORE, IT IS HEREBY DIRECTED AND ORDERED:

To further catalyze the development of innovative products and processes through green chemistry in Oregon, the Green Chemistry Innovation Initiative is established.

1. The following are four strategic areas where Oregon policies and programs can effectively foster innovation:
 - a. Building Awareness: State agencies, including but not limited to the Department of Environmental Quality (DEQ) and Business Oregon, will build awareness in the business community about the economic, environmental and public health benefits that are created by using green chemistry. To accomplish this, DEQ and Business Oregon, working in partnership with business leaders and other relevant organizations, including universities, will develop an outreach and education strategy designed to help organizations identify opportunities to apply green chemistry in ways that strengthen competitiveness and address chemicals of known and emerging concern. That outreach strategy should include efforts to highlight existing efforts consistent with green chemistry principles.

In addition, the Oregon Department of Administrative Services (DAS) may provide information on best practices and appropriate training materials for environmentally preferable purchasing to state agencies that procure goods or services. For purposes of this executive order, environmentally preferable purchasing means goods and services that have a lesser or reduced negative effect on health and the environment when compared with competing goods and services that serve the same purpose. This comparison may consider acquisition of raw materials or



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production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the goods or services.

- b. Providing Innovation Tools: DEQ, Business Oregon, and DAS, working with representatives from businesses, universities and other interested organizations, will develop proposals to incentivize green chemistry through new or existing programs, including state investment funds and loan and grant programs, among others. Such proposals may include proposals for legislation.
- c. Strengthening Demand: DAS, in consultation with DEQ, will revise state purchasing and procurement practices to include specific guidelines designed to reduce effectively the amount of toxic chemicals of concern contained in products used by state agencies, as well as by contract service providers to state agencies. The guidelines will establish clear preferences for products designed and manufactured in a manner that is consistent with the principles of green chemistry. DAS and DEQ will solicit input on the development and implementation of the purchasing guidelines from experts identified from within state government and organizations outside of state government prior to implementation. DEQ's Toxics Focus List and other state-based toxics priority lists will be used as the initial basis for determining toxic chemicals of concern.

By December 31, 2012, DAS and other state agencies will begin implementation of revised purchasing and procurement guidelines on a pilot basis for cleaning products using, to the extent practicable and relevant for chemicals of concern, third-party product certification programs that have been established to reduce toxic chemicals in products. DAS also may develop a chemical disclosure form for use by each bidder or proposer providing cleaning products to a state agency as part of this pilot program. In developing and implementing the use of such a form, DAS will assure that the form does not require disclosure of proprietary information.

By July 1, 2013, DAS, in consultation with DEQ, will complete a plan for revising purchasing guidelines that effectively reduce the amount of toxic chemicals of concern for other product categories including but



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not limited to electronics, furniture and building materials. The plan will identify time frames for the implementation of the revised purchasing guidelines for specific product categories, as well as related modifications to the current Lifecycle Costing methodology that will, to the extent practicable, incorporate environmental and social costs from product cradle to grave. To help ensure that revised guidelines are implemented by state agencies, they should be incorporated into individual agency sustainability plans.

- d. Refining Toxics Reduction Strategies: To further promote efficient and responsive state government, DEQ will (and DAS may) refine and enhance strategies to improve the development and use of safer alternatives to toxic chemicals and reduce the adverse impacts of toxic pollutants in the state.
 - i. The Governor's Office will convene a group of agency leaders to work collaboratively on the development of an Oregon Interagency Toxic Chemical and Pollutant Reduction Strategy. The Strategy will build on existing effective state programs, ensure efficient coordination between agencies, and address gaps related to toxic chemicals of concern. This interagency strategy will draw from the recommended actions described in DEQ's Toxics Reduction Strategy, including those designed to support more widespread use of green chemistry. To the extent feasible, environmental metrics will be developed and included in the strategy to achieve downward trends in the use and release of toxic chemicals of concern in Oregon.
 - ii. Individual state agencies will integrate policies to promote the use of safer alternatives to toxic chemicals through green chemistry, as well as the safer management and use of those chemicals, into existing programs as part of the Interagency Toxics Reduction Strategy.
 - iii. DEQ will evaluate the adequacy of the existing Toxics Use and Hazardous Waste Reduction Program to determine if modifications are necessary to more effectively promote and support green chemistry in Oregon businesses and institutions.



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- iv. DEQ will identify at least two industries in Oregon where green chemistry should be applied to reduce the use and generation of chemicals of concern included in the Toxics Reduction Strategy Focus List. Once identified, DEQ will develop voluntary action plans that emphasize opportunities to use green chemistry in ways that protect human health and the environment.
2. Deliverables: To evaluate the impact of the actions included in this Executive Order, DEQ, Business Oregon and DAS will prepare a biennial report to the Governor on the status of implementation. Specifically, the implementation report will include information about the following:
 - a. Building Awareness: Number and type of organizations reached as part of the outreach and awareness activities.
 - b. Strengthening Demand: Identify and utilize relevant metrics for assessing the reductions in toxic chemicals of concern through state procurement and purchasing, including the extent to which revised purchasing guidelines have been integrated into agency sustainability plans.
 - c. Providing Innovation Tools: Description of potential new innovation tools or modifications to existing tools that could be included in a legislative proposal.
 - d. Refining Toxics Reduction Strategies: Status of efforts to develop Interagency Toxics Reduction Strategy, the extent to which agencies have taken steps to integrate policies, potential modifications to the Toxics Use and Hazardous Waste Reduction program and development of industry-specific action plans.
 3. For purposes of this Executive Order, products are consistent with the principles of “green chemistry” if they are designed and manufactured using the following principles:
 - a. They avoid the use of hazardous chemicals.
 - b. They maximize the incorporation of all materials used to create the final product.
 - c. They use and generate substances that minimize toxicity to health and the environment.
 - d. They accomplish their desired function while minimizing the toxicity of the product.
 - e. They minimize the use of extraneous substances.

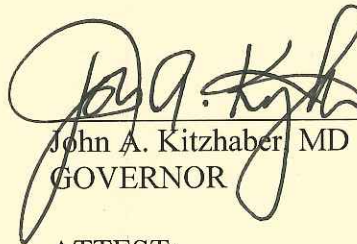


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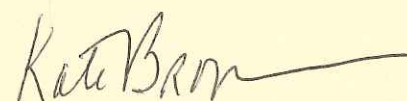
- f. They minimize the amount of energy used when creating chemical products.
 - g. They use renewable raw material or feedstock.
 - h. They minimize or avoid the conversion of a chemical compound into a derivative.
 - i. They use catalytic reagents instead of stoichiometric reagents.
 - j. They are designed so that chemicals used in the goods and services break down into innocuous substances.
 - k. They use a chemical process that minimizes the potential for chemical accidents, including chemical releases, explosions and fires.
4. These directives are in addition to those in Executive Order 00-07: Development of a State Strategy Promoting Sustainability in Internal State Government Operations; Executive Order 03-03: A Sustainable Oregon for the 21st Century; and Executive Order 06-02: Sustainability for the 21st Century.
 5. In the event of a conflict between any provision of Oregon law, including but not limited to the Oregon Public Contracting Code, and this Executive Order, Oregon law will prevail and the remaining terms of this Executive Order shall remain in force and effect.
 6. This Executive Order shall remain in effect until it is otherwise modified, amended or terminated.

Done at Portland, Oregon, this 27th day of April, 2012.




John A. Kitzhaber MD
GOVERNOR

ATTEST:


Kate Brown
SECRETARY OF STATE