From: Murray, Chuck (COM) <chuck.murray@commerce.wa.gov>

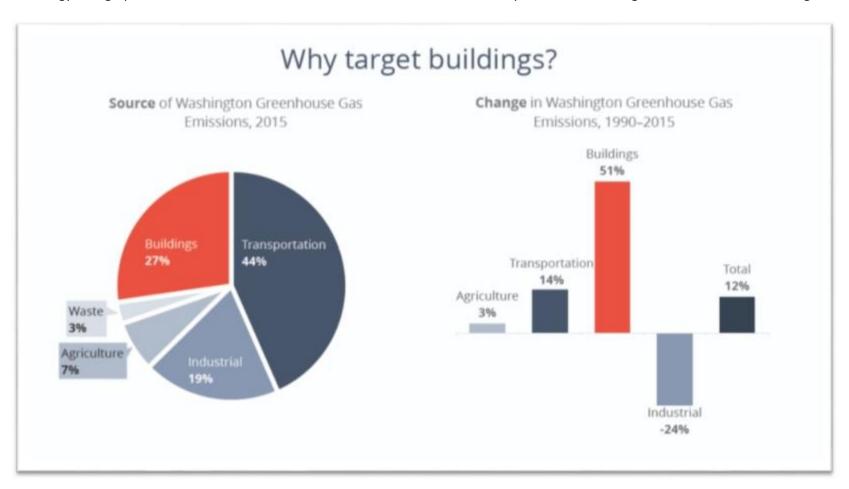
Sent: Friday, September 27, 2019 9:21 AM

To: DES SBCC <sbcc@des.wa.gov>

Cc: Brown, Richard (DES) <richard.brown@des.wa.gov>; Braaksma, Krista (DES) <krista.braaksma@des.wa.gov>

Subject: Comment supporting consideration of the 2018 WSEC.

I have attached a document that was produced by the Governor's office, supported by analysis conducted by the Washington State Department of Ecology. The graphs below were extracted from this document to illustrate the importance of reducing carbon emissions in buildings.



Chuck Murray Washington State Department of Commerce State Energy Office 360 725-3113

Join the discussion on Clean Buildings (HB 1257) Sign up for Email Updates https://www.commerce.wa.gov/buildings May 2019



WASHINGTON TAKES BOLD STEPS TO REDUCE GREENHOUSE GAS EMISSIONS FROM BUILDINGS



Buildings are the most rapidly growing source of greenhouse gas emissions in Washington state. While statewide emissions have grown 10 percent overall since 1990, building emissions have jumped by 50 percent, more than any other source in our state.

As Washington's population continues to grow, so does the number of new homes and business spaces being constructed. Each time we construct a new building or remodel one, we either lock in inefficient energy use or we embrace materials and technologies that will save energy and reduce emissions for decades to come. The longer we wait to enact higher standards, the greater the missed opportunity.







The good news is the solution to cutting building emissions lies in energy efficiency, which is the fastest, cheapest way to cut carbon emissions and other harmful pollution. Efficiency is a resource, like any other source of energy. But unlike other sources of energy, when we tap into it to meet our needs, we actually lower our energy bills and reduce our emissions.

In the Pacific Northwest we're good at developing energy efficiency. We can meet 100 percent of our electricity growth over the next 20 years with it. But to do that in a way that also allows us to reach our emissions reduction targets, we'll need more efficiency than we're getting through current programs.

#1

Washington ranks #1
for lowest-cost energy,
as well as #1 for % of
carbon-free
electricity

Advanced technologies, smart appliances and whole-building energy management systems are creating new opportunities. Through policy and investment, we can ensure our communities take advantage of the rapid pace of innovation.

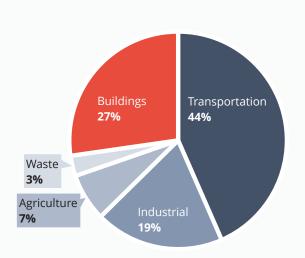
Building-related emissions are the state's fastest growing source of greenhouse gasses and account for 27 percent of the carbon

pollution in Washington. Now, under the new Clean Buildings Act, Washington will be the nation's leading state in commercial building energy requirements.

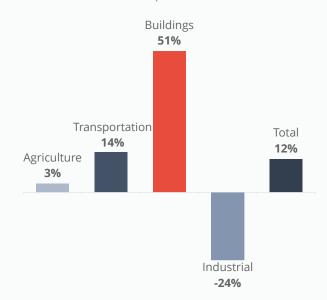
Combined with a separate new law that sets energy efficiency standards for a range of commercial and residential equipment and

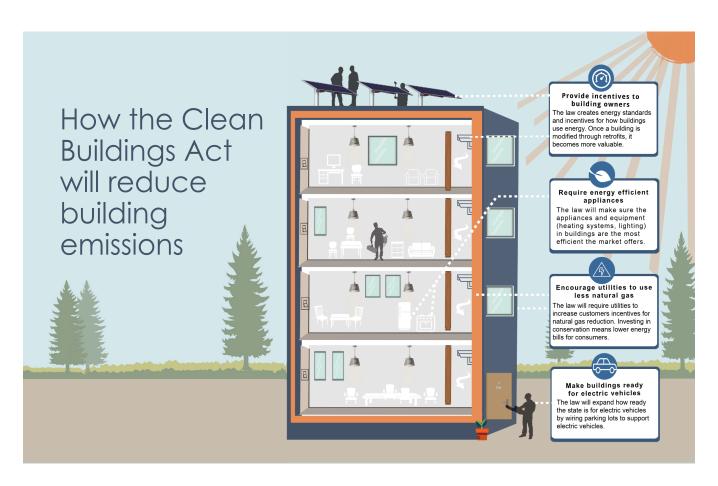
Why target buildings?

Source of Washington Greenhouse Gas Emissions, 2015



Change in Washington Greenhouse Gas Emissions, 1990–2015





appliances, Washington has the tools it needs to make buildings a big part of the state's solution to meeting its GHG reduction goals.

Key features of new building policy

The Clean Buildings Act (House Bill 1257) establishes a first-of-its-kind standard that will improve the energy performance of thousands of large commercial buildings in Washington. Commercial buildings that are 50,000 square feet and larger must comply in phases, with the largest beginning in 2026 and most coming into the program by 2028. The standard itself will be based on an "energy utility index" — a simple measure

of energy use per square foot. To account for widely varying energy uses between different commercial buildings and the influence of colder weather in the eastern half of the state, the standard will be adjusted by building category and geography.

Energy efficency measures supported 7,700 living-wage jobs between 2008 and 2012.

Owners maintain full control over what investments to make to meet the standard. From changing out lighting to installing new energy management systems or updating the building envelope, the regulation leaves it to the owner to make the investments that add the most value to the building. The approach establishes an accountable goal and lets the

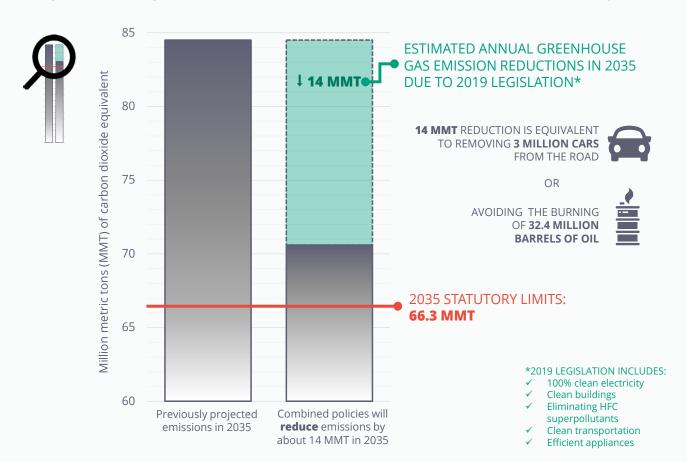
owner determine the best way to achieve it. Starting in 2031, the Department of Commerce will update the standard every five years.

A number of additional components create flexibility and help owners comply. First, a \$75 million early action incentive fund administered by The Department of Commerce's Energy Office is available for qualified retrofit projects. These grant funds will be administered in partnership with utilities and may be combined with incentives to lower capital costs and reduce payback periods. No owner will be required to make an investment that doesn't pay for itself

over the lifetime of the project. An alternative compliance pathway is available for owners who can't achieve the standard even after making all cost-effective investments. By setting the effective dates for most buildings to 2028, owners will have time to take advantage of tenant improvements and turnover to make upgrades when it's cheapest to do so.

While the new energy standard will reduce emissions by providing incentives for investing in energy efficiency, new conservation requirements on gas utilities will bring even greater greenhouse gas reductions. Following

This package of legislation is the state's biggest step yet toward reaching the greenhouse gas emissions reductions needed to reach **2035** statutory limits



4

electric utility practice that has helped keep costs for Washington ratepayers among the lowest in the nation, utilities must make greater use of conservation to meet the growing demand for gas to operate buildings. Utilities this year will begin taking into account the costs of carbon pollution when evaluating the benefits of conservation measures. This will make more conservation investments cost effective and

reduce the demand for gas. At the same time, utilities must expand programs to make renewable natural gas — a cleaner alternative to fracked gas — available to customers who want to purchase it.

Energy efficiency appliance standards

Washington's new appliance energy efficiency law (House Bill 1444) sets standards and design

\$2 Billion



Energy-efficient measures can help Washington avoid \$2 billion in energy costs over the next 15 years requirements for 17 product categories, including lighting, computers/monitors and various plumbing equipment. Efficiency standards are highly cost-effective tools for reducing emissions and save money on energy bills. Washington began setting product efficiency standards in 2006, and this legislation is a major update and expansion that will save Washington consumers more than \$2 billion

in avoided energy costs over the next 15 years. The legislation is part of a multi-state effort by the U.S. Climate Alliance, 24 states working to uphold the nation's commitment to reduce greenhouse gas emissions under the Paris Climate Agreement. Washington is the first state to pass efficiency standards since the alliance announced plans for member states to establish common standards across states.