

**EPA Clean Power Rule Hearings – Denver, Colorado
July 30th, 2014**

**Statement of Michael J. Holtz, FAIA, Founder and Principal of LightLouver LLC
Boulder, Colorado**

Good afternoon. My name is Michael Holtz, and I am pleased to offer my views on EPA's proposed Clean Power Plan rule. For over 40 years, I have been employed by or have founded and managed energy, daylighting and sustainable design, research, design consulting and manufacturing companies, including the American Institute of Architects Research Corporation, the Solar Energy Research Institute, Architectural Energy Corporation, and LightLouver LLC. I have been engaged in all aspects of energy efficient, sustainable research, urban planning and architectural design.

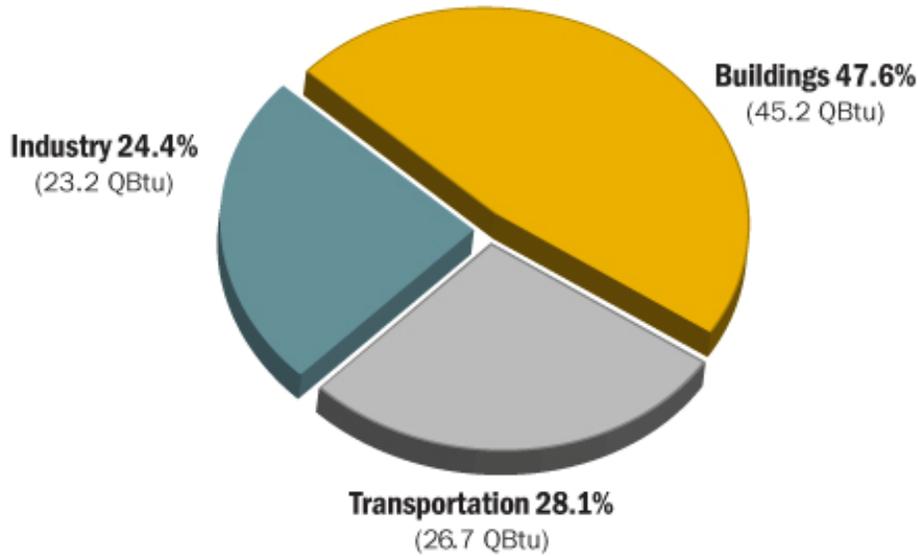
I am here today to give my support and endorsement of the proposed EPA Clean Power Plan rule.

As one who has devoted his professional career to improving the energy efficiency, to increasing the use of the renewable sources of energy, and to reducing the environmental impacts of the built environment, I can say that we are over 30 years late in proposing these CO₂ reduction requirements.

Today, in the few minutes I have to present my views, I want to encourage all national, state and local policymakers, electric utilities, industry and others impacted by this proposed rule to address the supply or source (EGU) side of the equation equally with the demand side of the equation. That is, the proposed rule has two main elements: (1) state-specific emission rate-based CO₂ goals and (2) guidelines for the development, submission and implementation of state plans. The first element lays out the state-specific emission reduction targets or goals, while the second element defines the requirements for development, submission and implementation of state plans for achieving these targets.

The beauty of the proposed rule is that it is performance-based, not prescriptive, and allows states to meet their specific performance targets in any manner of their choosing, so long as they are effective and lasting. This performance-based approach allows states to address the energy supply side as well as the energy demand side opportunities within their states.

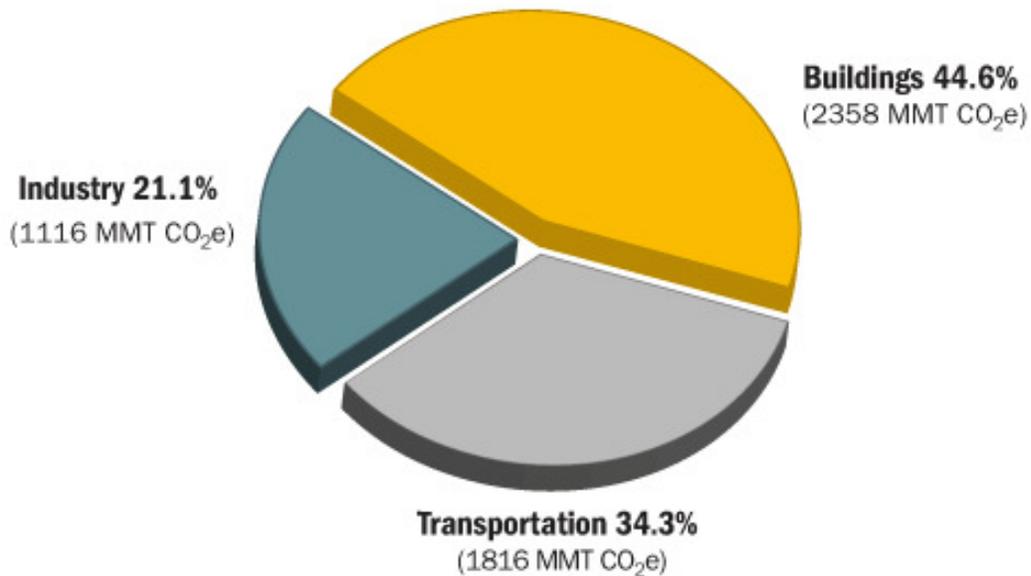
Most Americans are unaware that the building sector is responsible for 47.6% of total U.S. energy consumption in the U.S. According to the U.S. Energy Information Administration, the total U.S. annual energy consumption in 2013 was 95.1 Quadrillion Btu. The building sector consumed 45.2 Quads, while the transportation sector consumed 26.7 Quads and the industry sector consumed 23.2 Quads.



U.S. Energy Consumption by Sector

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 Data Source: U.S. Energy Information Administration (2012).

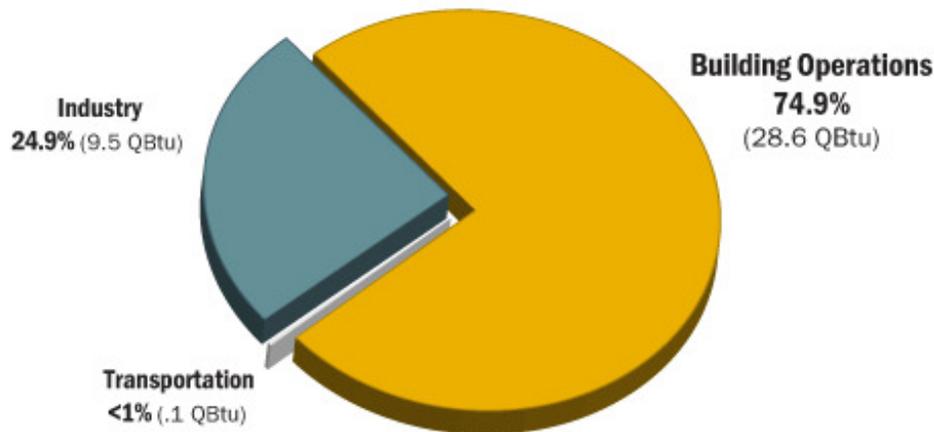
As a consequence, the building sector accounts for 44.6% of all U.S. CO₂ emissions, generating 2544 MMT CO₂e. The building sector far exceeds the transportation and industry sectors, in the amount of CO₂ emissions, which generate 1816 MMT CO₂e and 1116 MMT CO₂e respectively.



U.S. CO₂ Emissions by Sector

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 Data Source: U.S. Energy Information Administration (2012).

Relevant to the proposed EPA Clean Power rule, the building sector, according to the U.S. Energy Information Administration, consumes annually 74.9% of all the electricity generated in the U.S. The industry sector consumes 24.9% of annual electricity generation and the transportation sector less than 1%.



U.S. Electricity Consumption by Sector

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Data Source: U.S. Energy Information Administration (2012).

It is pretty clear where I am headed with this analysis. The building sector is the single largest consumer of energy in the U.S., the largest emitter of CO₂, and the largest user of electricity. Consequently, it would behoove states in preparing their compliance plans to look closely at the energy use of the building sector in their states, and to proposed strategies for improving the energy efficiency of new and existing buildings. These strategies could include financial incentives for integrating energy efficiency technologies in existing residential and commercial buildings, more stringent building energy codes, home and commercial building energy rating and labeling programs, and designer education and training programs.

The point I am making is that this rule does not dictate how states must meet their CO₂ reduction target, and allows for great flexibility and innovation. However, I would urge all states to seriously and closely look at both energy supply side opportunities and energy demand side opportunities.

While I support the overall approach to CO₂ emission reduction proposed in the rule, I believe the state-specific emission reduction targets are much too low and that the timeframe for achieving these goals is much too long. The reduction goals are benchmarked against a 2005 baseline of CO₂ emissions, and is not an appropriate baseline given the increase in renewable energy supplied electricity that has come on line since 2005. This baseline waters down the 30% reduction goal and makes it far too easy to demonstrate compliance. If EPA keeps the 2005 baseline, the CO₂ emissions targets should be on average be doubled.

The timeframe for meeting the CO₂ emission reduction goals should be ten years or less. The U.S. utility, building, industry, and renewable energy sectors are fully capable of aggressively pursuing and implementing CO₂ emission reduction strategies with current and near term commercially available technologies. With aggressive emission reduction targets and a shorter implementation / compliance timeframe, the full force of U.S. innovation will be turned loose that will create new technologies and new jobs, and to establish U.S. leadership in CO₂ emission reduction throughout the world.

With the experience of the Affordable Care Act, where 30 states opted out of Medicaid expansion and attempted to scuttle the entire implementation effort, EPA must have strong remedies / penalties if state plans for meeting their CO₂ emission targets are deemed to be inadequate and likely ineffective. The flexibility that EPA has given states in meeting their CO₂ emission targets should not be used to obstruct full compliance with the EPA rule.

My last comment is to those who oppose this EPA Clean Power Plan rule. I encourage them to consider an ancient Native American saying:

We do not inherit the earth from our ancestors; we borrow it from our children.

We have run out of time to solve the Climate Change crisis; we are now in a desperate race to save the planet.

Thank you for the opportunity to present my views on the proposed EPA Clean Power Plan rule.