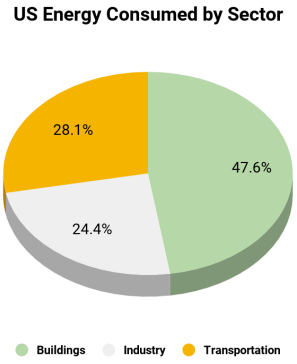
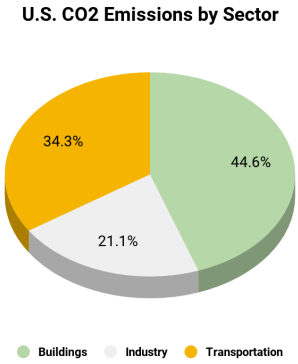
Energy Efficiency - Expedited

Building & Zoning Code
Permitting Process Incentives for Energy Efficient Design and Construction

In the United States, residential and commercial buildings are responsible for over 47% of total energy consumed and more than 44% of all CO2 emissions.





Source: Architecture 2030 / Data Source: U.S Energy Information Administration (2012)

Energy Efficient Building

- **Significantly Increases Adoption** of net-zero building practices by incentivising energy efficient construction through zero cost incentives like expedited permitting and bonuses in zoning and building codes.
- **Low cost utility bills** provide security for low-income populations in a increasingly volatile market.
- **Healthier indoor environments** come from high efficiency ventilation.
- **Critical next step** to meet City of Portland's lower carbon footprint goals.

Goals of Portland Climate Action Plan

"Homes that are affordable, healthy, comfortable, durable, and highly energy efficient."

- Reduce CO2 emissions by 40% of 1990 levels by 2030 and 80% by 2050.
- Rolled out the Home Energy Score program in collaboration with Enhabit, Energy Trust, and utilities to improve energy efficiency of residential buildings.
- Build market demand for net-zero energy buildings through incentives, education, demonstration projects, partnerships and recognition.

Meeting the Goals of the Portland Climate Action Plan

- ➢ **Expedited permitting** is the next step in meeting the City of Portland's climate action goals that will break down existing barriers to green building.
- ➢ **Residential Home Energy Score** already requires new homes to be assessed and is an easy tool for BDS to determine qualification with minimal staff input needed.
- ➢ **Multi dwelling density bonuses for energy efficiency** to meet the City of Portland's lower carbon footprint targets.

Current cities with expedited green building permitting

- Salt Lake City, Utah
  - Expedited projects meet Energy Star HERS rating of 85 or better
- San Diego, California
  - Sustainable Building Expedite Program
- Houston, Texas
  - Expedited building permits issued for Energy Star HERS of 75 or better
- Seattle, Washington
  - Priority Green Expedited shortens time by meeting green building rating
- Miami-Dade County
  - Green building incentive lets project take fast track permitting
- Issaquah, Washington
  - Green Building Incentives Built Green certification by fast tracking permit
- Chicago, Illinois
  - Expedited green permits given for LEED Homes or Green Globes ratings
- San Francisco, California
  - Priority permits issued if meeting one of a variety of green certifications

Incentives for Energy Efficient Homes and Buildings

In the United States, residential and commercial buildings are responsible for over 47% of total energy consumed and more than 44% of all CO2 emissions, which means a unique responsibility falls to the design and construction community to increase efforts to mitigate CO2 emissions and the effect on climate change.

However, the necessary expertise to deliver high-performance building cost effectively is not yet ingrained with local builders and designers. Incentivizing highly energy efficient building is required in order to establish a solid foundation for a necessary market transformation.

Money provided through tax incentives are helpful but typically don't offset current additional costs, and also come with the negative financial cost to the incentivising body. This is where expedited permitting and density bonuses can make a real differences in project feasibility.

Building Code is the ultimate tool to usher in deep adaptation of high-performance building. The Building Codes Division received its direction via the recent executive order by the Governor Kate Brown and has an opportunity to get ahead of coming changes. Code cycles and its process are a slow train, and Portland has an opportunity to show the feasibility of significant reductions through energy efficient design and construction thereby informing future increases in code requirements.

Another important effect of energy efficiency in building is the security it provides for residents - owners and renters alike. Being able to rely on the same low, monthly utility cost provides a tremendous relief, particularly for the most vulnerable in our community. Energy efficient buildings addresses housing affordability for the long term, and are independent from housing or energy market volatilities.

Another beneficial effect worthy to note is the building durability and healthy indoor environment. Ensuring low energy consumption of buildings typically requires additional care in the construction, which increases the expected lifespan of the building and lowers maintenance costs. Higher performing enclosures also increase occupant comfort and simple yet sophisticated mechanical systems ensure a healthy indoor environment, which again benefit us all but particular the most vulnerable.

In summary, the benefits are tremendous for not only for owners and occupants, but for the community at large. BDS could be instrumental in encouraging the adoption of energy efficiency and high-performance building practices through simple incentives like expedited permitting.

Expedited permitting is already a common practice in many jurisdictions and many resources for implementation, and best practices should be available for review.

The possible challenge for BDS staff to determine the level of energy efficiency of an applying project, as well as the threshold qualifying for expedited permitting, can be addressed by tying into another recent directive: the Portland HES Ordinance.

DRAC and BDS, ideally in conjunction with BPS, would set the minimum HES rating qualifying a project for expedited permitting for single dwelling projects, and Portland already has a network of qualified verifiers to draw from. Finalizing the permit would then depend on verified HES rating.

The proposal is for DRAC to ask BDS to evaluate possibilities for expedited permitting for homes meeting a certain HES score, as well as to support a collaboration with BPS to include density bonuses for high-performance buildings into the ‘Better Housing by Design’ initiative, or similar efforts.

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