

**University of Washington Focus the Nation Panel:
Green Building and the Urban Landscape in the 21st Century
1:30 – 3 pm on Jan 31, 2008 in HUB209A, UW Campus
Summarized by Lisa Marin**

Moderator: Daniel Friedman, Dean, College of Architecture and Urban Planning, UW
Nancy Rottle, Assoc. Professor, Dept. of Landscape Architecture, UW
Tom Paladino, Paladino and Co., US Green Building Council (USGB) Board of Directors
Jason McLennan, CEO of Cascadia Region Green Building Council
David Miller, Professor, Dept. of Architecture, UW and Co-founder, Miller/Hull Partnership

Moderator Daniel Friedman began with a brief introduction of the panelists. He reminded the audience that over 60% of greenhouse gas emissions are produced by construction/buildings, and that 70% of electricity is used by buildings. Therefore, green building has the potential to make a huge contribution to mitigating climate change.

Tom Palladino gave a short presentation suggesting that the problem of scarcity in green building should be reframed as one of abundance – in other words, what things specific to the function and context of a site can we use to best advantage? Examples included consistent daylight allowing for natural lighting and energy-efficiency (PNC Bank in the mid-Atlantic) and dry heat and high visitor count providing recycled toilet water for green landscaping and moister, cooler air (visitor center in Las Vegas). He also noted that 70% of US building stock would need to meet the LEED silver rating just to comply with the Kyoto protocol (the city of Seattle now requires all new city buildings to achieve this rating).

David Miller's award-winning architecture firm Miller/Hull designed Merrill Hall (the first LEED silver building on campus) and the Conibear Shellhouse (athletic village) at UW, both of which employ natural ventilation. He stressed that it will take a long time to redo all of UW in order to create an integrated, ecologically sustainable campus – we need a new master plan!

Nancy Rottle spoke about designing for climate change protection and adaptation. By 2050, it will be 2 – 4 °F warmer in the Pacific Northwest, resulting in less snowpack, stronger winter storms, and reduced water supply despite greater demand due to our anticipated population growth. To minimize the impacts of climate change, we need 1) urban greening to mitigate heat island effects by providing shade and transpiration, 2) stormwater filtration to reduce pollution and intensity, 3) water harvesting and reuse, and 4) preservation of healthy forests to sequester CO₂.

She stressed that the urban form is more compact/efficient and should be made more attractive for residents, with bike & pedestrian access and mass transit as well as access to amenities including open spaces. Eating locally grown foods reduces the need for transport fuels and refrigeration. We can also generate low impact energy (e.g, by harnessing power of vertically dropped water).

Jason McLennan reminded us that cities adapted from horse to car very quickly and now must adapt dramatically once more despite a building industry that is slow-changing and risk-averse.

He described the “Living Building Challenge” <http://www.cascadiagbc.org/lbc>: Carbon- and water-neutral projects built from nontoxic materials on previously developed sites. There are 50 – 60 projects planned in North America, 2 or 3 of them in Seattle.

Q & A Session:

Define “nontoxic” buildings.

About 80% of toxic caulks, sealants, glues, etc. can be eliminated by identifying and offering alternatives. Ductwork should be kept sealed during construction. Filtration should be increased.

How can we apply these principles to existing buildings, especially for individual homeowners?

There are many resources out there including the Environmental News Network website

<http://www.enn.com/> , the West Coast Green expo in San Francisco

<http://www.westcoastgreen.com/> , the Environmental Home Center in Seattle

<http://www.environmentalhomecenter.com/index.html> , the King County website

<http://www.kingcounty.gov/environment.aspx> , and Venolia and Lerner’s book *Natural*

Remodeling for the Not-So-Green House.

David Miller reminded us that we should preserve our best building stock – older buildings made from simple materials, designed to work well without A/C, with high ceilings for better daylighting, etc.

What about disposing of old materials when you remodel?

Often the vast majority of materials can be reused/recycled rather than landfilled. However, a lot of modern materials were never meant to be reused, which is a problem.

What financial incentives are out there for green building?

We need to be more creative rather than asking for “extra” money, which will never be there because developers seek to maximize profits. But the LEED certification system is also a great motivator because of publicity and because most developers are still men who want to win/look better than the next guy.

Concluding remarks:

Moderator: The Mithune-Russell Foundation is underwriting a professorship for alternative building production models.

Jason: We need to integrate more empirical data into our regulations.

David: Nature has been experimenting with energy efficiency for many millions of years – we should take advantage of her innovations!

Announcement: The Living Future Conference is April 17-18, in Vancouver.

Reminder: WALKING TO WORK is one of the best ways to reduce your carbon footprint!