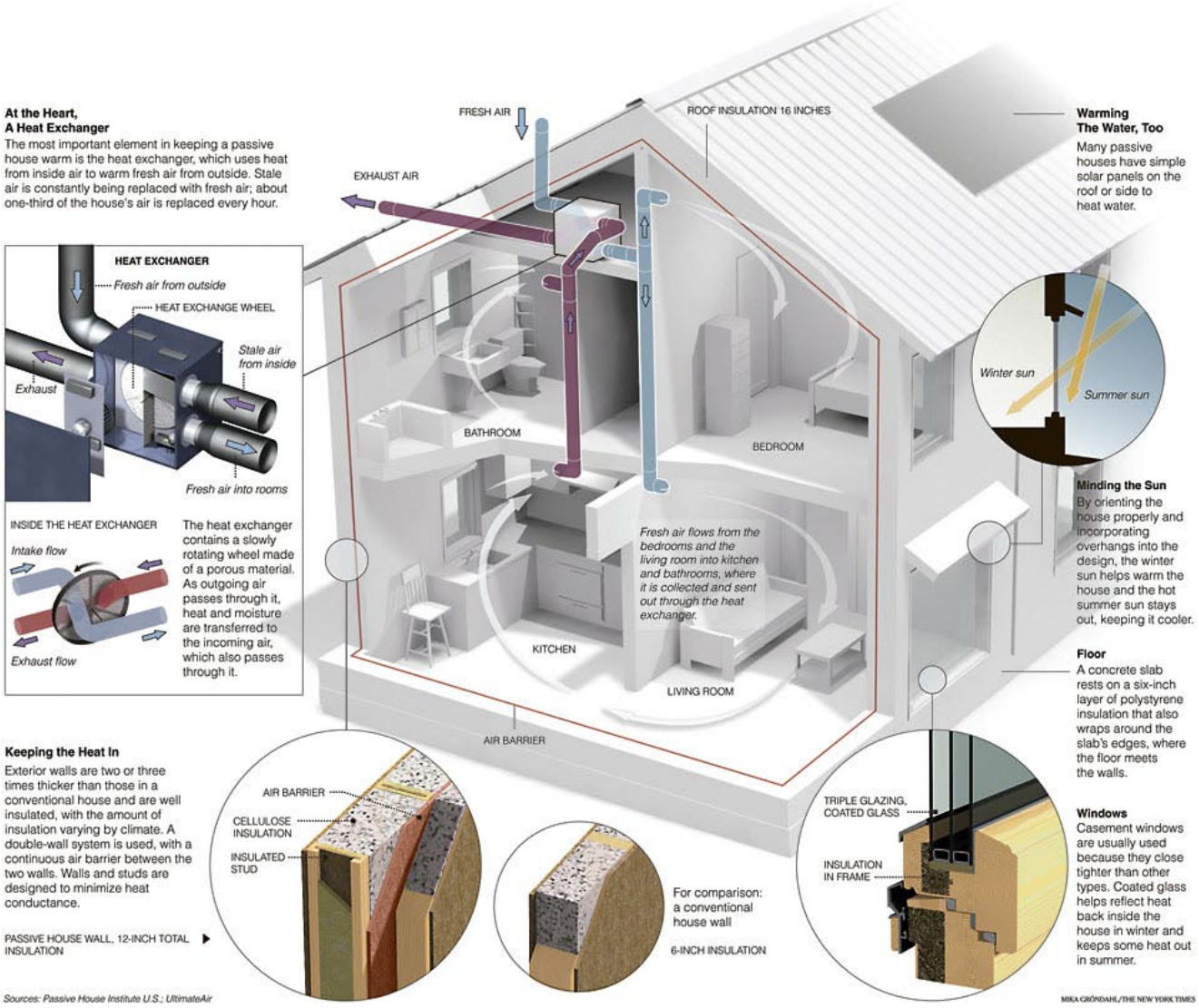
# INTRODUCING THE PASSIVE HOUSE by Jamie Wolf

**What is a Passive House?** Passive House is a rigorous and uncompromising building energy design and performance standard developed and proven in Germany, being embraced internationally, and now available in the U.S.

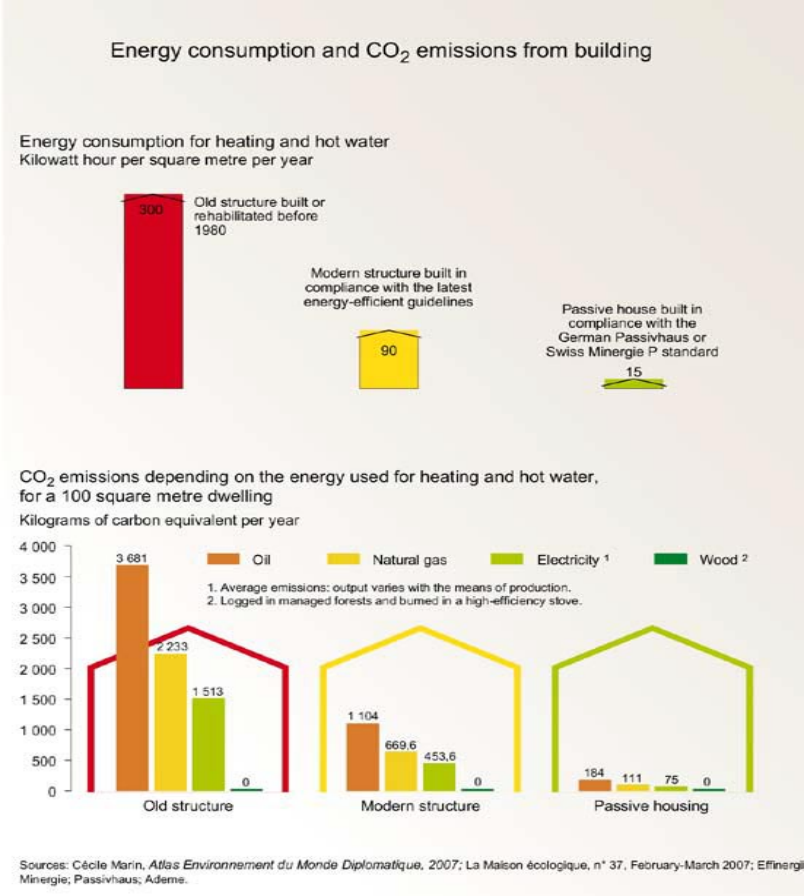
**What does it do?** Passive House assures that a building takes the greatest advantage of available "gains" while minimizing energy "losses". The resulting "energy balance" provides a building with exceptional comfort and health, simplified operation, and dramatically lower operating costs.

**Why does this matter?** Passive House is a deliberate response to the challenges of climate change and carbon reduction. By using dramatically less energy, these buildings are truly "future friendly". Their benefits represent a significant redefinition of comfort and satisfaction. This is your future!



**ECOMONICS:** MISERLY USE OF TREASURED ENERGY … by dramatically increasing the energy efficiency of a building, the mechanical system can be radically downsized. The cost savings are invested in more insulation and better windows and doors. This efficiency "sweet spot" is the basis for the Passive House performance standard and the key to its financial feasibility.

**COMFORT:** SURPRISINGLY EVEN AND STABLE … Passive House provides incredible year round comfort. Its built-in ability to maintain healthy and comfortable room climates means that the temperature, humidity levels, and the inside temperature of exterior surfaces stay within very close margins. The result is an indoor climate few of us have ever experienced.




**HEALTH:** FRESH AIR AND VITAL SPACE … a constant fresh air supply exchanges inside air with tempered and filtered outside air. Occupants are less likely to suffer from allergies and asthma. Filters in the ventilation equipment help reduce pollen and environmental pollutants from the outside air. Beneficial natural daylight is a result of the windows that provide solar gain.

**ENERGY:** LOWER USE, LESS COST, INVITES RENEWABLES … the Passive House standard is the highest energy standard available. It results in an 80% to 90% reduction in the US average. The goal is simple: reduce energy consumption up front by making a better building envelope – the slab, walls, roof, windows, and doors. It limits the amount of primary energy powering a home dramatically reducing its ecological footprint and your utility bills. Alternative and renewal energy sources become more attainable, meaning that a Passive House can become carbon neutral or even produce more energy than it consumes.