



SUSTAINABLE HOUSING

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When hyphenated words are used positively the hyphen will be changed to the plus +, when they're neutral the tilde ~ will be used and when they're negative the conventional hyphen - will be used.

The positive will be taken even further, where the x (which signifies an incorrect answer) will be changed to the directly proportionate math sign \propto , except when the word is negative it will remain the x.

All writing applies justified, one line sentences that never exceed 18 words and three line sentences that never exceed 34 words, as convention says a sentence should never exceed 34 words.

ENVIRONMENTAL LIVING HOUSING

ENVIRONMENTAL LIVING HOUSING fully enables the transition to sustainable housing. There is ever increasing demand for housing to offer environmental net zero impact. In the past, home builders and renovators promoted size and esthetics over efficiency. New home and pre-owned renovation buyers seldom planned for utility costs to rise. It was normal to ignore the fact that utility costs will increase significantly over time. The pay back argument was often presented to show that energy efficiency didn't pay. The issue with the pay back argument was environmental impact was not considered. The thinking was short-term, as convention, cost, size, esthetics and profit took priority.

Housing that is not built environmental will cost more to operate and offer lower resale. Conventional, modern-era, housing is provided with a generic group of utility services. Conventional utilities includes fuel(s), water, electrical, sewer and communication(s). Utilities are second to the mortgage and property tax, when it comes to household cost(s). Utility cost(s) will increase, which should not include communication(s), but likely will. However, fuel(s), water, power and sewer costs will significantly increase over time. Increasing household cost(s) effects huge demand for Environmental Living Housing. Environmental Living Housing offers a way to reduce household utility use and overhead. Environmental Living Housing increases user comfort, disposable income and resale value. Environmental Living Housing further minimizes carbon taccation that is already escalating.

Home buyers will increasingly seek homes that present five Environmental Living features. They are healthiness, comfort and safety with minimal cleaning and operating costs. It is key to remember that Environmental Living features are more costly to do later. Esthetical features can most often be done later with ease and usually for less money. The benefit of environmental saving will make it worth putting off esthetics, until later. If it comes down to a choice between the two, Environmental Living is the wisest. Many new home buyers can afford to do both, but those that cannot will be able to later. Environmental Living Housing minimizes overhead and frees up disposable income. Disposable income is what allows the homeowner(s) to perform esthetical upgrading.

New home buyers typically prefer a custom home, but often settle for a volume build. The reason is price and terms are generally a bigger factor than quality and efficiency. Volume builders offer economy of scale pricing and a selection of speculation homes. Volume builder offers often include incentives, such as free items and special pricing. However, there are many home buyers that can afford and desire a custom built home. They seek custom quality construction that accommodates personal lifestyle choices. People typically wish to accommodate household need and live a right-sized lifestyle. Custom builders offer new home buyers the means to build to personal specifications. Custom builders offer services that price conscious buyers are not inclined to pay for. Custom builders offer progress fleccibility, attention to detail and quality workmanship. Also, a custom build will typically offer a better resale value than a volume build.

ENVIRONOMICAL LIVING HOUSING

ENVIRONOMICAL LIVING HOUSING will be developed on an AI computer program. The computer plans will be inclusively detailed and relatively easy to read and follow. AI computer design modeling enables dividing home building plans into components. Dividing home build plans into components enables applying pre+built manufacturing. AI computer design applies quick and easy changes with minimal effort and cost. Accommodating the modification process is ideal for the custom building marketplace. The custom home buyer(s) can build a new home to exact personal specification(s). Quality control is best facilitated in the controlled environment of a manufacturing plant. The biggest advantage of building in a manufacturing plant is that weather is not an issue. Tolerances can be held to a 16th of an inch, which avails fit and finish and renovating. Waste material(s) disposal and recycling are much easier to control in an indoor facility. Manufactured construction effectively accommodates and minimizes construction time. Homes that are entirely pre+built can be placed and ready for use in a matter of weeks.

Environomical Living Housing will start with minimum sized lots and range on upwards. All homes will effectively fit the street scape and architectural design of the community. Homes will be pedestrian friendly with minimal front yards and maximum back yards. Back and front yard living rooms will effectively enable four season outside enjoyment. Yards will be effectively deck ready and include a flower and vegetable garden capacity. Fencing will be offered that accommodates keeping pets and other animals in and out. Fencing will offer shelter from the weather, eliminate traffic motion and ensure privacy. Yard design(s) will include secure walkway access from the front yard to the back yard. Housing will incorporate battery storage and powering similar to that of the RV industry. The batteries will be powered by solar power that also handles all the grey power use. Biofuel power generation will become common to both the housing and the RV industry.

Environomical Living Housing offers RV parking and will enable RV living, when required. Both the housing unit and connecting RV will fully handle extreme weather conditions. Connecting a housing unit to an RV is a most efficient, low+cost way to add guest space. The housing unit(s) will accommodate a travel trailer, 5th wheel trailer or motorhome. To add user friendliness, the ideal connecting RV will also apply toy hauler functionality. Functionality will include electrical slide(s) and ramp+door(s) with a manual back+up. The ramp+door(s) will open with ease to facilitate workshop area and vehicle parking. The ramp+door(s) will also readily convert to a balcony that includes a screen tent. Slides that extend upwards will be offered to avail standing+upright in a loft type room. The connecting RV will mechanically and manually disconnect to facilitate RV recreation. It will be very simple to disconnect the RV from the housing unit, whenever it is required. Motorhomes are part of the auto industry, which is transitioning into alternative energy. The major downfall with RV's is the depreciation factor effects a steady loss of value. The depreciation factor can be effectively minimized, when land is part of the equation. A home that connects directly to an RV adds space, use, comfort, value and resaleability.

ENVIRONMENTAL LIVING HOUSING

ENVIRONMENTAL LIVING HOUSING applies passive solar and space efficient design. Passive solar is the best way to reduce energy use without adding operating costs. It includes roof overhang for cooling shade and window exposure for thermal lighting. The older style wrap-around overhang and deck is the best example of passive solar. It also includes the use of trees and fencing to provide shelter from the sun and wind. Environmental Living includes co-gen, biofuel, biomass, wind, solar, earth and water. A biofuel or biomass burn requires minimal venting, as the exhaust is relatively clean. This facilitates space efficiency, as the chimney can be minimized, or even eliminated. Wind, solar and geothermal are carbon neutral, as nothing is exhausted into the air. Wind and solar rely on the wind and sun, which is typically intermittent and unreliable. Co-gen provides heat, backs-up weather energy and facilitates net metering revenue. Earth or geothermal energy is entirely reliable, as it makes use of heat from the earth. Heat pumps are most effective at accommodating both the heating and cooling functions. A geothermal system is ideal for hot water, radiant heat or forced air heating and cooling. The applying of passive solar with alternative readiness offers long term cost savings.

The footprint will be insulated and the foundation will be built to last at least 250 years. The framing will be strategically beefed-up to facilitate prospective future renovations. Closed-cell spray-on foam insulation is best, as it seals and adds structural strength. Plus, it takes up less space, stops air and sound infiltration and offers leading R-value. It is also non-toxic, non-allergenic and fully pest, water, mold, void and fire resistant. The ductwork will be made air tight and a radiant barrier will be added to the envelope. All ventilation, windows and doors will facilitate industry-leading, leak-proof efficiency. The cold-water-intake and water lines will be insulated and warmed with waste heat. Only plumbing fixtures that minimize household water consumption will be installed. Grey water recycling and run-off capture will be combined with electronic disinfection. This facilitates reducing water use and wear and tear on the sewer and water system.

The heating will include in-floor radiant heat, as it is the best way of heating a house. In-floor heat effectively enables the use of either a conventional or alternative system. Conventional in-floor systems are alternative ready and can be easily converted, later. Alternative heating systems are cost effective, as the operational costs can be fixed. The plumbing will apply smart electronic metering of all incoming and outgoing water. It will even include run-off capture that accommodates exterior water conservation. The best hot water heating system is on-call, which makes hot water within seconds. It also offers the means to significantly minimize the consumption of energy and water. It further eliminates the bulkiness of the conventional tank, which adds to living space. Indoor air will be smart air exchanged and metered to monitor and ensure air quality. The benefit is indoor odors, condensation and pollution will be practically eliminated. Fireplace ambiance will be provided, via the use of emission-less built-in biofuel units. The built-in biofuel fireplace(s) will be fed from the fuel tank of the co-generation plant.

ENVIRONOMICAL LIVING HOUSING

ENVIRONMICAL LIVING HOUSING will safeguard against power surges and brown outs. The electrical system will be back+up power ready to accommodate power outage(s). The wiring will be hardwire plumbed, electromagnetically shielded and smart metered. Lightning strike and power surge protection cuts risk(s) and lowers insurance cost(s). Back+up power ready offers a low cost way to hook+up to alternative power sources. Conduit plumbing minimizes electrical fire risk and enables repair and EMR shielding. EMR shielding contains the electromagnetic radiation emitted by the electrical current. Smart metering enables power use control and net metering offers a revenue source. Net metering enables the selling of excess co+generated electricity to the power grid. Co+generation minimizes power failure risk and net metering calculates grid credits.

The electrical lighting will include use of high efficiency led bulbs throughout the home. LED bulbs last long+term, do not emit heat and enable adjusting the lighting ambiance. Supplemental lighting will be used to add sunlight and make the home bright and airy. Conventional window coverings require vacuuming and cleaning on a continual basis. Between+the+glass blinds are a great alternative, as only the glass requires cleaning. Electronically controlled operation of either type will add security and energy efficiency.

Anti+disaster features will be offered to reduce disaster risk and lower insurance cost, which includes radiant cement that melts off the snow and ice at the flip of a switch, structural and exterior product(s) that minimize(s) damage(s) from extreme weather, window glass that prevents ultra violet rays from harming the eyes and inside fabric(s), window glass that stops shards from spraying, when hit forcefully by a flying object, gates that are recessed into doorways to accommodate toddler safety and pet control, electrical ice melt systems in the roofing and gutters that stop ice dams from forming, fire prevention that includes the use of fire resistant product(s) and sprinkler systems, electronic security that uses video communication(s) and water and sewer shut+off(s), and a disaster+secure room that offers safety from bad weather and toxic air pollution.

Health, comfort and efficiency will be presented as environomical living build features. Health, comfort and efficiency will begin with challenged ready, zero clearance access. The build will be strategically reinforced to avail all future required challenged installs. The build will also be effectively constructed with a litany of future renovations in mind. For instance, basements without teleposts will effectively accommodate renovation ease. House dust and off+gassing, as well as sound and thermal transfer will be minimized. The plumbing will be water system ready to offer water softening and carbon filtration. The drinking water will be filter purified and include a drinking water tap at each sink. All household appliances will be energy efficient, functionally smart and user friendly. Electrical and biofuel quick connects will feed the outside barbecue(s) and fire+pit(s). 220 Volt outlets will be installed to facilitate spa operation and electric vehicle charging. Homes will be officially certified and offer a soft and hard manual with online control.

ENVIRONMENTAL LIVING FEATURING

WATER

- ONLINE WATER METER
- ON+CALL HOT WATER
- ECOFLOW FIXTURES
- GREY WATER RECYCLING
- WATER CONDITIONING
- PURE DRINKING WATER
- STORMWATER CAPTURE



ANTI+DISASTER

- RADIANT CEMENT+WAYS
- U.V. & TEMPER GLAZED
- SHARD BREAK PROOF
- ICE DAM PREVENTION
- FIRE PREVENTION
- SENSOR VIDEO SECURITY
- DISASTER+SAFE ROOM



BUILDING

- SPACE EFFICIENT DESIGN
- HEALTH+SAFE MATERIALS
- LONGEVITY FOUNDATION
- LONGEVITY STRUCTURAL
- LONGEVITY ENVELOPE
- LONGEVITY EXTERIOR
- LONGEVITY LANDSCAPE



ELECTRICAL

- HARDWIRE PLUMBING
- EMR SHIELDED WIRING
- SURGE PROTECTION
- 110/220 VOLT SYSTEM
- GENERATOR AND BATTERIES
- INVERTER AND CONVERTER
- ON+LINE NET METERING



COMFORT

- INSIDE SOUNDPROOFING
- BUILT+IN CASE GOODS
- BIOFUEL FIREPLACE(S)
- RENOVATION(S) READY
- OFFICIAL CERTIFICATION
- HARD AND SOFT MANUAL
- ONLINE HOME CONTROL



PLUMBING

- LONGEVITY PLUMBING
- WATER INTAKE WARMING
- EASY ACCESS CLEANOUTS
- HEAT RECOVER VENTILATOR
- OUTSIDE GAS CONNECTS
- BIOFUEL FEEDER TANK
- ALTERNATIVE MECHANICALS



LIGHTING

- HIGH EFFICIENCY LED BULBS
- AUTO BACK+UP LIGHTING
- IN+GLASS WINDOW BLINDS
- AUTO WINDOW COVERINGS
- DEPLOYABLE AWNINGS
- NATURAL SOLAR LIGHTING
- SOLAR PANEL SKYLIGHTING



RESIDENTIAL SUSTAINABILITY

ENVIRONMENTAL LIVING BENEFITING

SEALED, HIGH R+FACTOR

- MINIMIZES HEAT TRANSFER
- MINIMIZES NOISE POLLUTION
- MINIMIZES AIR INFILTRATION
- CUTS OUTSIDE ALLERGENS
- ELIMINATES MOLD GROWTH
- MINIMIZES PEST INFILTRATION
- LOWERS INSURANCE RISK



U.V. TEMPER GLAZED

- STOPS FADING FROM SUN
- MINIMIZES U.V. EYE RISK
- BLOCKS OUTSIDE GLARE
- MINIMIZES HEAT TRANSFER
- REDUCES ENERGY COST
- STOPS OUTSIDE FIRE HEAT
- LOWERS INSURANCE RISK



PASSIVE SOLAR

- FREE ENERGY SOURCE
- MAKES USE OF SUNSHINE
- ADDS WINDOW EXPOSURE
- ADDS BEAUTY TO YARD
- REDUCES UTILITY COSTS
- CUTS IMPACT ON ECOLOGY
- MATURE TECHNOLOGY



INFLOOR HEATING

- MOST COMFORTABLE HEAT
- HEAT RISES FROM FLOOR
- WARMEST NEAR FLOOR
- ELIMINATES FURNACE DUST
- MINIMIZES HOME CLEANING
- MINIMIZES AIR ALLERGENS
- COST EFFICIENT



TANKLESS H2O HEATER

- ON DEMAND HOT WATER
- MINIMIZES WATER USE
- UP TO 35% COST SAVINGS
- ELIMINATES TANK BULK
- MAINTENANCE FREE
- ULTRA QUIET OPERATION
- ELIMINATES BACTERIA RISK



WIND, SOLAR, EARTH

- HEATS AND COOLS HOME
- FREE ENERGY SOURCE
- CLOSED LOOP SYSTEM
- MINIMUM MAINTENANCE
- ZERO EMISSIONS
- ENABLES CO+GENERATION
- ENABLES NET METERING



PLUMBED EMR SHIELDED

- MINIMIZES FAILURE RISK
- ELIMINATES PEST RISK
- MINIMIZES WIRE EXPOSURE
- EASY TO REPAIR/RETROFIT
- MINIMIZES FIRE RISK
- MINIMIZES EMR RISK
- LOWERS INSURANCE RISK



RESIDENTIAL COMFORT

ENVIRONMENTAL LIVING HOUSING

ENVIRONMENTAL LIVING HOUSING OFFERS GOVERNMENTS, BUILDERS, ARCHITECTS, DEVELOPERS, FINANCIERS, INSURERS AND BUYERS A WAY TO MINIMIZE BUILDING, OPERATIONAL AND ENVIRONMENTAL COSTS.

- LOWER DEVELOPING, BUILDING AND RENOVATION PERMIT COSTS WILL BE OFFERED ON SUSTAINABLE HOUSING TO HELP REDUCE HOUSING CONSTRUCTION AND PRE-OWNED RENOVATION COSTS.
- LOWER MORTGAGE INTEREST RATE FINANCING WILL BE OFFERED ON SUSTAINABLE HOUSING THAT IS, AS A DIRECT RESULT, MUCH LESS PRONE TO HOUSEHOLD OPERATIONAL PRICE INCREASES.
- LOWER MUNICIPAL PROPERTY TAXATION WILL BE ASSESSED ON FIRE-RESISTANT AND CARBON-NEUTRAL HOMES TO ENABLE THE REDUCTION OF EMERGENCY SERVICES AND CARBON EMISSIONS.
- LOWER HOUSEHOLD WATER USE WILL REDUCE THE STRESS ON MUNICIPAL WATER INFRASTRUCTURE AND DECREASE WATER INFRASTRUCTURE MAINTENANCE AND HOUSEHOLD WATER COSTS.
- LOWER HOUSEHOLD ENERGY USE WILL CUT HOUSEHOLD ENERGY INFRASTRUCTURE AND OPERATIONAL COSTS, IN ADDITION TO RESIDENTIAL HOUSING AND PUBLIC UTILITY CARBON EMISSIONS.
- LOWER HOUSEHOLD DISASTER RISK WILL OFFER PEACE OF MIND, QUALITY OF LIFE AND DISPOSABLE INCOME, AS THE HOUSEHOLD SAFETY, MAINTENANCE AND INSURANCE COSTS WILL BE LESS.
- LOWER HOUSEHOLD HAZARD RISK WILL EFFECTIVELY HELP TO DECREASE EMERGENCY INJURIES, HEALTHCARE COSTS AND THE EVER INCREASING LOAD ON HEALTHCARE FACILITIES AND STAFF.

ENVIRONMENTAL LIVING HOUSING INCLUDES A BUILDING APPROACH THAT FACILITATES THE FUTURE ADDITION OF SELECTED UP-GRADES AND ACCOMMODATES USER COMFORT AND HOUSEHOLD LONGEVITY.

CUSTOM BUILT FAMILY LEGACY