

# Characteristics of the green roof and how it reduces energy cost

[Literature](#), [Russian Literature](#)



Environment 1042 Characteristics of the green roof and how it reduces energy cost Green roof applies natural vegetation instead of the traditionally and most commonly used artificial materials such as iron sheets. It adopts vegetation that represents a true garden in the normal environmental set up. One of the major characteristics of the green roof is therefore its observed nature that distinguishes it from the artificial roof. While the artificial roof is ‘ non-generic’ and inorganic, the green roof is majorly made of living substances in the form of plants. A substrate layer that sustains the plants also characterizes the green roof. This layer of materials accommodates water and contains nutrients for the green roof plants. Another characteristic feature of the green roof is its potential to emulate a real garden. This feature allows the roofing system to be uses as an economic and social resource. It makes economic contribution from its potential as a garden and social impacts from its capacity to be used for recreation purposes. In its application, the green roof shelters dwellers of a building in the same way as the traditional roofing works but doubles as natural vegetation (Voelz and Loux, p. 2).

Based on its features, the green roof plays significant economic roles. The agricultural aspect for instance generates food resources among other materials. The system particularly plays a significant economic role in regulating expenditure in energy costs. Since it is a poor heat conductor, the green roof is able to maintain a favorable room temperature irrespective of the environment. It subsequently saves the amount of money that could be used in warming houses during cold seasons and cooling houses during hot seasons. The technology is however not yet popular among people and has

therefore not been appreciated (Voelz and Loux, p. 4, 5).

#### Efficiency processes facilitated by EPA buildings

EPA regulations, for EPA buildings, are associated with a number of efficiencies to the environment. Examples of the efficiencies include “ water efficiency, waste reduction, toxic reduction, and indoor air quality” (Epa, p. 1). Departments in the Environmental Protection Agency with the aim of ensuring safety and improving environmental conditions run these efficiency programs. The water efficiency program facilitates manufacture and distribution of water facilities and water services to the public. As a result, water efficiency provides for quality in water supply and services to promote healthy living standards among the public. Waste reduction efficiency on the other hand protects the environment from pollution. It ensure proper waste disposal resulting in a healthy and safe environment. Like the waste reduction efficiency, toxic reduction ensures an environment that if safe and free from pollution. The efficiency however focuses on chemical emissions into the environment by industries. In collaboration with other partners, the efficiency program controls industries to ensure a safe environment that is free from emission of harmful chemicals. It therefore protects the public from diseases and infections caused by exposure to chemicals. Lastly, indoor air quality program ensures that EPA buildings are constructed in regard to health and safety standards. The efficiency therefore ensures safety and comfort of residents in a bid to protect life and promote healthy living conditions (Epa, p. 1).

#### Works cited

Epa. “ Components of green building”. U. S. Environmental Protection

<https://assignbuster.com/characteristics-of-the-green-roof-and-how-it-reduces-energy-cost/>

Agency. Available from: <http://www.epa.gov/greenbuilding/pubs/components.htm#energy>. [Accessed on 4 April

2012].

Voelz, Jan, and Loux, Jeff. "The characteristics & benefits of green roofs in urban environments". Available from: [http://extension.ucdavis.edu/unit/green\\_building\\_and\\_sustainability/pdf/resources/green\\_roof\\_02.pdf](http://extension.ucdavis.edu/unit/green_building_and_sustainability/pdf/resources/green_roof_02.pdf). [Accessed on 4 April 2012]

[Accessed on 4 April 2012]