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Nations Roof ESG Analysis

The United Nations Sustainable Development Goal 11 is based on sustainable cities and human settlements (United Nations). This century's demographic shift to large urban areas has been accompanied by a massive increase in energy consumption, elevated emissions, and high concentrations of greenhouse gasses (EPA). Large urban areas have been transformed into heat islands characterized by air quality issues and fine particulate matter (EPA). However, green infrastructure is geared to address the social, environmental, and economic impacts of increasing urbanization (The Zebra). Green buildings specifically are an essential aspect of urban sustainability and green infrastructure (*What is a Sustainable City?*). Green buildings are characterized by smart heating and cooling systems, solar panels, enhanced ventilation and insulation, and green roofs (EPA). There are a variety of major companies in the roofing industry, but one stands out in terms of sustainability and green roof efforts. Nations Roof contributes to urban sustainable development efforts in the roofing industry by actively promoting green roofing. However, the roofing industry at large lacks accountability and standard measures for sustainability, and there are multiple challenges blocking the way to green urban infrastructure.

The construction industry is vital to net zero sustainability efforts. Construction accounts for over 40% of the United Kingdom's total carbon emissions, and in order for net zero goals to be reached, this industry must become more sustainable (*Nicholson Roof Products*). The roofing industry can contribute to sustainability efforts by using recycled and renewable materials for new building projects, which would reduce energy consumption and waste production

(*Nicholson Roof Products*). The roofing industry can also take into consideration the lifespan of materials used, and implement design solutions that incorporate high-quality sustainable materials in order to increase the longevity of roofing (*Nicholson Roof Products*). Green roofs specifically are excellent at offsetting a building's carbon footprint, and are vital to the net zero movement (*Nicholson Roof Products*). By working towards these measures, the roofing industry can combat climate change by reducing the impact construction has on the environment, while simultaneously providing high quality buildings for future generations.

Nations Roof is the foremost company working towards green roofing and sustainability measures. Created in 2004 and based in the United States, Nations Roof grew exponentially due to their dedication to prolonging the lifespan of roofing systems (*Nations Roof*). Currently ranking 4th in the industry for revenue and market share, Nations Roof has been labeled an All Star company due to their profit and revenue growth in comparison to their peers (Clark). Since 2016, Nations Roof has steadily grown in revenue, operating income, and growth change (Clark). They operate within 26 states, and specialize in single ply roofing, TPO roofing, metal roofing, solar roofing, and green roofing (*Nations Roof*). Nations Roof has a large section on their website for green services, where users can access all of the information regarding the different types of green roofing they provide (*Nations Roof*). They also state in this section that Nations Roof "believes in using recycled resources on every project" (*Nations Roof*). Nations Roof states that their goal with recycled roofing is to reduce landfill waste by treating recycled material as raw material (*Nations Roof*).

There is a common misconception that green roofing only includes garden roofs, but there are actually a variety of ways to structure a green roof. Nations Roof has a multitude of green roofing systems, including daylighting systems, solar panel systems, garden roofs, and

cool roofs (*Nations Roof*). Daylighting systems reduce energy consumption and improve employee morale, while solar/photovoltaic systems can turn roofing into an energy production asset (*Nations Roof*). Cool roofs reflect the sun's heat instead of transferring into the building, which ultimately decreases maintenance costs and prolongs roofing lifecycles (*Nations Roof*). Garden roofs have a variety of planted roof components that contribute to stormwater management, reduce urban heat island effects, reduce building energy usage, provide more efficient thermal insulation, and increase biodiversity (*GSA Sustainable Facilities Tool*).

Since Nations Roof is a private company, there is a massive lack of external reporting. The CSR Hub has no ESG information on Nations Roof, Nations Roof does not report with SASB Standards, and the MSCI ESG Ratings database also has no information on this company (*MSCI, SASB, CSRHub Ratings*). However, despite this lack of external reporting, Nations Roof does have specific project examples listed on their website. Nations Roof has green roofing project operations in Via Verde, Port Imperial, and at a UNICOR facility site (*Nations Roof*). In Resurgens Plaza, Atlanta GA, Nations Roof installed a garden roof on the east wing's 14th floor, which included a waterproofing structural system (*Nations Roof*).

Despite the benefit that green roofing has for environmental and social issues, there are multiple challenges that prevent green roofing from being a widespread standard. The vast majority of the roofing market produces asphalt roofing, single ply roofing, and sheet metal roofing (Clark). Whereas Nations Roof has multiple resources and outlooks into their green services, many other companies do not. The top roofing company in the United States, Tecta America, has only one section on their website that briefly mentions green roofing (*Tecta America*). Multiple roofing companies do have some sort of green roofing aspect on their website, but almost all of them lack substantial information and proof of action. The fifth highest

ranking company in the nation, Holland Roofing, has absolutely no information on green services or green roofing (*Holland Roofing*).

There are a variety of reasons as to why green roofing is currently unpopular within the industry. First of all, green roofing is a relatively new development (Kiger). It wasn't until the 2000s that green roofing came to the United States, and in 2017 it was estimated that only 1,000 green roofing projects were in action (Kiger). Green roofing is also often perceived as a greater expense than traditional roofing. This is because buildings that have green roofing require additional support structures in order to handle the increased load (*Green Roofers*). Green roofing typically adds 50-200kg/meter squared to an existing rooftop, but most flat roofs are often able to be altered relatively easily to adapt to this load (*Green Roofers*). Green roofs also do require extra maintenance in order to maintain a green space atmosphere (*Green Roofers*). However, while planted roofing has higher costs upfront, they utilize long term cost savings by prolonging longevity, boosting thermal performance, improving drainage systems, and supporting local habitats (William).

There are multiple construction industry trends that can also be used to explain the lack of popularity with planted roofing. The roofing industry in general has seen varying cycles of an increase and decrease in revenue, often due to over reliance on private nonresidential construction (Clark). Due to long build times, this sector of the market tends to move very slowly, which has contributed to the instability of the roofing industry (Clark).

Furthermore, there are often obstacles on the municipal policy side of green infrastructure. In a personal interview with Murray Myers, he stated that in San Antonio there are not any local companies working on green roofing infrastructure (Myers). Unfortunately, Nations Roof only operates in Houston and Austin for Texas facilities (*Nations Roof*). Murray

Myers stated that varying state governments often present complicated obstacles for green infrastructure movements (Myers). He continued that “progressive cities expect climate mitigation efforts to be underway, but Texas often limits what municipalities can do” (Myers). More moderate or progressive states can establish laws or guidelines to standardize the set of rules that infrastructure firms are operating under, and some states can even provide funding for sustainability efforts and climate initiatives (Myers). However, none of this exists in conservative states like Texas, and the burden is entirely on municipalities to implement sustainability plans (Myers).

Murray Myers also stated that while larger municipalities like San Antonio can have an entire sustainability department, most smaller municipalities often only have one position (Myers). Furthermore, in order to actually create and implement sustainability initiatives, multiple municipal departments have to work together (Myers). San Antonio’s Office of Sustainability often works with Government and Public Affairs, Public Utilities, Parks and Recreation, Solid Waste, Building and Equipment Services, Transportation, Neighborhood and Housing Services, and more (Myers). These collaborations can lead to greener criteria for city infrastructure, and adjustment of city codes to promote sustainable homes and commercial buildings (Myers). However, the coordination of multiple municipal departments often feels like “pushing a lever encased in rust” (Myers).

Murray Myers did conclude by saying that sometimes the market or the private sector can help push for more sustainability initiatives (Myers). There are a few firms and nonprofits in San Antonio working on sustainable building design. Build SA Green works to certify green homes in San Antonio, and actively promotes solar powered residential areas (Myers). Lake Flato works towards sustainable building designs by focusing on carbon and resource efficiency and water

conservation, and they actually helped with the design of Trinity University's new Dicke Hall Building (Myers). Credit Human contributes to energy solutions through solar efficient infrastructure (Myers). With these firms and nonprofits actively working towards sustainable design, he stated that in the future green roofing could become more popular in San Antonio (Myers).

There is a particular nonprofit that is working with companies like Nations Roof on green building. The U.S. Green Building Council promotes LEED certifications within more than 100,000 buildings (*USGBC*). LEED is a widely used green rating system established by the U.S. Green Building Council, and it provides a framework for cost-saving measures in green buildings (*What Is LEED Certification?*). Nations Roof is actually participating in a program called Together Working in Green (TWIG) in collaboration with LEED certified engineers (*Nations Roof*). In this program, LEED roofing experts partner with Nations Roof experts to design and install green roofing systems on residential homes (*Nations Roof*).

Furthermore, despite the issue with external reporting in the roofing industry, The USGBC predicts that ESG reporting as an industry will continue to grow. The USGBC is actively working on sustainable finance tools such as green finance, green bonds, and green leases that are tailored towards smaller firms in order to support this trend (*USGBC*). The USGBC also works towards establishing green building codes by providing baseline green benefits and foundations for applying to LEED certifications (*USGBC*). For example, the 2018 International Green Construction Code, which USGBC was a sponsor for, is an adoptable and enforceable standard for the design and construction of green buildings (*USGBC*).

There is also some effort from the national government in support of green roofing. The U.S. General Services Administration has a Sustainable Facilities Tool that allows users to

explore green roofing (*GSA Sustainable Facilities Tool*). This tool states that roof space is often a wasted resource, since it has the potential to generate and save energy, slow stormwater runoff, and enhance tenant amenities (*GSA Sustainable Facilities Tool*). This tool also lists the increasing number of options available for planted roofs, solar roofs, and cool roofs (*GSA Sustainable Facilities Tool*). The GSA Sustainable Facilities Tool also describes the waterproof membrane, leak detection system, drainage layer, root-resistant layer, vegetation, and growing medium of planted roofs (*GSA Sustainable Facilities Tool*).

This tool can be useful for green roofing companies, since the regional differences across the United States heavily impacts what type of planted roof can be implemented (*GSA Sustainable Facilities Tool*). Planted roofs typically thrive in warm and dry climates, and as a result potential projects outside of those climates must be evaluated in order to determine plant viability and energy performance (*GSA Sustainable Facilities Tool*). Planted roofs and green roofs in general must be tailored to local climate conditions and building surroundings, and the GSA Sustainable Facilities Tool has resources to determine what planted roofs are suitable for specific regions in the United States (*GSA Sustainable Facilities Tool*). The GSA Tool also has a section on tips and strategies for companies working in green roofing in order to make the process more efficient and standardized (*GSA Sustainable Facilities Tool*).

In conclusion, the construction industry has a major role to play in urban sustainability efforts, especially when it comes to green infrastructure. Since green roofing is such a significant component of green buildings, it will take widespread commitment within the roofing industry as a whole to standardize green roofing. Nations Roof is clearly leading the way with their commitment to green roofing, sustainability services, and recycled construction. Despite the lack of external reporting on their ESG efforts, Nations Roof clearly stands out from peer companies

in the industry. There are still many challenges that prevent green roofing from becoming the standard of roofing services. However, mounting sustainability trends within the public in combination with the efforts of individual companies, sustainability offices, and nonprofits will surely expand green roofing across the industry in the years to come.

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