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**ABSTRACT BOOKLET**



## **SURVEILLANCE BALLOON OR BREAKAWAY AIRSHIP (A CHINESE CONUNDRUM)**

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**Abstract:** The purpose of this paper is to investigate the recent Balloon sightings over Canada and the United States of America. This paper presents studies which discuss the chronology and aftermath of the event actions of the respective governments and analyze the use of balloons for surveillance. This paper also compares balloons and satellites for surveillance missions.

**Keywords:** LTA, Surveillance, Balloon, HTA

## **A REVIEW OF BIOMASS AS A SUSTAINABLE FUEL**

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**Abstract:** Energy is an essential component of human progress and development, playing a crucial role in driving economic growth, environmental sustainability, and social development. The energy sector has witnessed significant changes in recent years, with a shift towards renewable and sustainable sources of energy. Biomass energy, in particular, is emerging as a viable option, especially in low-income communities, providing a cost-effective and environmentally friendly source of energy. India has set a target of achieving 10 GW of biomass power installed capacity by 2022. While this goal is unlikely to be met due to challenges such as a lack of financial incentives and difficulties in securing adequate biomass feedstock, the government has launched several initiatives to promote its use. These include schemes to promote sustainable biomass production and management practices and initiatives like the Biomass Power and Bagasse Cogeneration Program and the National Biomass Cookstoves Initiative. Solid biomass is an accessible, low-cost, and sustainable source of energy that can be used for cooking, heating, and lighting in many developing countries. By using solid biomass instead of fossil fuels, developing countries can reduce their carbon footprint and contribute to global efforts to combat climate change. Moreover, solid biomass as an energy source has the potential to promote economic growth and development in rural areas.

**Keywords:** Solid biomass fuel, Biomass gasification, Briquettes, Torrefaction, Sustainability