



# Concept Note

## Indian Standards and Certification Scheme: “Safeboards”

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## Background

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The composite board products including Plywood, MDF, Particleboards have emerged as one of the most dominant building materials over the last three decades owing to their characteristics, viz., light weight, corrosion-free, insulation and cost-effective. This industry is growing rapidly from three lakh metric tons in 2015 to 4.18 lakh metric tons by 2020 at a substantial Compound Annual Growth Rate (CAGR) of 5.8% (ICERP, 2017). The exports of wood and wood products from India have been on an increasing trend. The major export destinations for Indian Plywood and Wood Products are USA (23%), Germany (10%), UK (9%), France (7%), UAE (7%), Italy (4%), Netherlands (3%), Australia (3%), Belgium (3%) and Spain (2%). The customers' demand for high quality of products is a top priority for which the exporters need to procure best quality of raw material to ensure quality specification to meet customer's expectation.

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## Project Overview

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The boards, however, do not provide a healthy indoor air quality to the occupants owing to the resins and chemicals used in their production and the emissions from their usage after years of installation in the buildings. Amongst the chemicals and resins used, particularly formaldehyde, during the manufacturing of the products release harmful emissions some of which are found to be carcinogenic leading to the poor indoor air quality for the users. Globally, 4.3 million people die annually and India itself accounts for nearly 4 – 6 lakh deaths from the exposure to household air pollution (WHO 2012, Smith 2000).

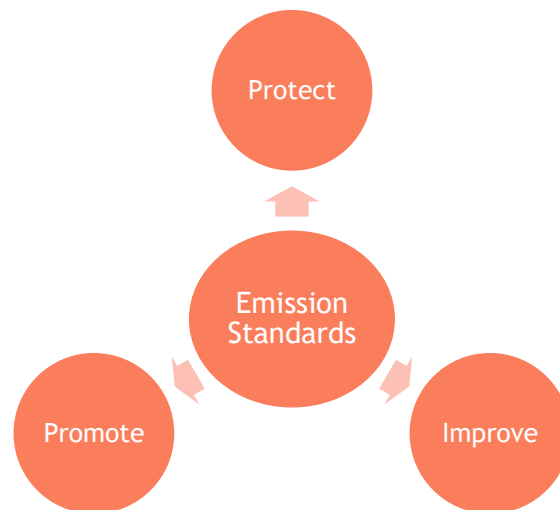
With rising awareness among the stakeholders, growing knowledge, research studies and consciousness, various countries such as Japan, America and Europe have established and worked upon (revisions) diligently and rigorously to cap the emission levels via standards and if need be to ban the products which cause danger and decreased quality of human health. Currently the existing standards in India (BIS Standards) addressing the qualitative characteristics such as density, water resistance, formaldehyde content etc., do not have any voluntary standards related to emissions in place as yet, resulting in majority of the plywood products not qualifying the most basic levels of the emission standards categories of the other countries' emission standards which affect:

- a. exports of such products in the global markets or even they get banned,
- b. seriously the health of people,
- c. informed choice of people to use these products.

By visualizing and realizing the facts and circumstances as stated above, NCCF established in 2015 developing nation specific yet internationally benchmarked sustainability certification standards, feels the need to formulate the national standards to make the Indian panel wood manufacturers deserve a place and position equivalent to other international manufacturers in the global market. These national standards will be a handy tool for manufacturers, government agencies, architects and corporates to fulfil their demands of low-emitting composite wood products and will also provide an edge to them over uncertified products.

In doing so, the emission levels of composite wood panel products would be reduced along with increased saleable value of the products leading to holistic environment and human health quality.

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project envisages to bring the wood products to international standards having value-added market. The mandate of this project will enable in process driving and product development of industries associated with them and cutting down of formaldehyde emissions for betterment of human health and overall environment. **NCCF wishes to take this vision forward as a mission.**

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## Benefits of the proposed emission-capping standards in India

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### Benefits to the Public:

#### Benefits of the low emitting materials

- Improve indoor air quality
- Improve workers' (at the mill) and occupants' (of the building where such products will be installed) safety and health
- The measurable benefits of green building initiatives on workers' productivity, "there is a direct correlation between increased productivity and the employees who love being in their work space".
- Reduce incidents of eye and respiratory irritation, headaches, fatigue and other symptoms of "sick building syndrome"
- Healthier environment for building occupants who are sensitive to certain products
- Reduce pollution of natural waterways

(The US Green Building Council gives another specific example of how commercial energy retrofits increase workers' health and thus productivity, "People in the US spend about 90% of their time indoors. Environment Protection Agency (EPA) studies indicate indoor levels of pollutants may be upto ten times higher than outdoor levels.")

### Benefits to the Industry:

The standards will add value and help the manufacturers to:

- Recognize the importance of maintaining environmental health and stability,
- Fulfil the requirement of maintaining the standards at par with international standards,
- Set the standards as per the market requirements,
- Improvised management practices to meet the international market's and customers' benchmarking,

- Avoid confusion of exporters and improvisation of small manufacturers to enter into the 'green-building' market,
- Meet the clients' requirements of LEED credit attainment (IEQ Credit 4.4),
- Get an opportunity to penetrate the international market and sustain against cut throat competition, as exporters need to have united efforts to meet ever changing market challenges,
- Customer satisfaction.

### Other benefits:

- Facilitating the sustainable management and production practices implementation and export of the plywood industries through the proposed standards development and certification mechanism **will also contribute to the success of "Make in India Programme" that Hon'ble Prime Minister** has so vigorously been pursuing domestically and internationally.
- Further, the elements of certification standards will complement various set goals of the SDGs (Sustainable Development Goals) 2030 to which India is a signatory and is making constant efforts to fulfill the same. The proposed standards will be contributing to the efforts by promoting good health and well-being of the public (SDG3) and help generate economic growth for the industry (SDG 8). The certification label enhances the prospects of sustainable economic growth by providing international market, trade access and enabling people to consume responsibly (SDG 10 & 12). Responsible and sustainable practices measures will help in avoiding or controlling the emissions adding up to climate change factors (SDG13). In addition, the process of Standards Development promotes multi-stakeholder partnerships facilitating the sharing of knowledge, expertise and financial resources at all levels (SDG17).

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### Timeframe

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Based on our experience in the standards development process and publication, it is expected that the formation of standards may take about six months.

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## Conclusion

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In this global market, there is an urgent need to have national standards for composite wood manufacturers which can maintain the suggestive lower emission levels of such products in order to provide healthy indoor air quality to the occupants reducing their harmful effects which lead to chronic diseases and badly affects nation's productivity. The standards will provide additional benefits to the manufacturers by producing certified products which will have international compliance and market value. It will help showcase the robust export potential of the industry.

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## Way forward

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Since people today spend most of their time at home or in an office, long-term exposure to VOCs in the indoor environment can contribute to IAQ related problems. Hence, it is pertinent to move towards low-emitting products by involving and educating the manufacturers, institutions, architects, corporate and public at large on the usage of low-emitting products.

The commercial, residential or sensitive (the sensitive buildings are classified as hospitals, schools, and old age homes, etc., where people sensitive to these emissions like women, children and old aged are occupants) need to make more and more use of low-emitting wood panel products at their site.

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## About Network for Certification and Conservation of Forests

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Network for Certification and Conservation of Forests (NCCF), a not for profit organization of India, is actively engaged in diverse conservation activities including, development of globally benchmarked and India specific sustainability certification standards for various constituents of our natural resource base, viz; forests, trees outside forests, non-wood forest produce, protected areas and wetlands, quality planting material, ecotourism, biomass and biofuels, land degradation neutrality, etc., as its core working areas, and also addressing the needs for policy advocacy in natural resource management, awareness raising, capacity building in and multi-stakeholders

engagement. NCCF is also developing a Carbon Registry-India aimed at providing a trading and tracking platform for verified GHG emissions reduction and removals enhancement.

NCCF's Certification Standards for Forest Management, first ever Indian Scheme of Certification, has been endorsed by the Programme for the Endorsement of Forest Certification (PEFC), a globally recognized certification organization giving it an international recognition.

NCCF has also developed a certification scheme for Trees outside Forests (ToF), the first of its kind not only in India but anywhere in the world, which is ready for use. Other Standards are at various stages of development.