



# India's Bio-Bitumen Milestone

Published On: 08-01-2026

- **Subject:** GS Paper III (Economy & Environment - Infrastructure)
- **The News:** India has become the first country to commercially produce **bio-bitumen** from biomass (agricultural waste) for road construction.
- **Background Data:**
- **What is Bitumen?** Traditionally a petroleum byproduct (asphalt) used to bind road materials. India currently imports about 50% of its bitumen.
- **Bio-Bitumen Benefits:** Developed using CSIR-IIP technology, it converts **paddy straw** and stubble into binder material. This addresses **stubble burning** (air pollution) and reduces crude oil import bills.
- Waste-to-Wealth initiatives, "Atmanirbhar Bharat" in infrastructure, and carbon footprint reduction in the transport sector.