

Detailed Case study information

Cross cutting

Description	The study, conducted under the GIZ Proklima “Cool Contributions fighting Climate Change (C4)” programme and funded by BMUKN, examines how Green Public Procurement (GPP) can drive the transition to climate-friendly cooling technologies. It analyses barriers, enabling conditions, and practical pathways for integrating sustainability criteria into public procurement systems for refrigeration and air conditioning equipment. A central feature of the study is the use of case studies to demonstrate how GPP can work in practice. These include both C4-supported country applications, such as Costa Rica, and leading international examples, such as India, which provide transferable lessons on market transformation and procurement design.
Achievements	The study's key achievement is the development of a structured framework identifying the main barriers and enablers for implementing Green Public Procurement in the cooling sector. It translates these findings into practical guidance for policymakers and procurement institutions. A major contribution of the study is the in-depth analysis of two flagship case studies: Costa Rica (C4-supported implementation): Under the C4 programme, Costa Rica developed one of the most advanced and institutionalised GPP systems for cooling. The country established a strong legal and regulatory framework, including enforceable environmental procurement criteria. Public tenders systematically integrate lifecycle-based evaluation, considering both energy performance and refrigerant impact. Dedicated institutional structures, such as inter-ministerial committees and advisory bodies, ensure strong coordination and consistent application. In addition, monitoring systems track procurement outcomes, while clear guidance documents and tools support procurement officers. Through C4 support, Costa Rica also piloted green public procurement of R290 air conditioners, demonstrating feasibility and scalability. India (external best practice case): India provides a powerful example of how bulk procurement mechanisms can transform markets. By aggregating demand for air conditioners across public buyers, large-scale tenders significantly reduced unit costs, making high-efficiency technologies more affordable. This created a strong demand signal that encouraged manufacturers to scale production of efficient units. The procurement design included not only equipment supply, but also installation, warranties, and maintenance, ensuring quality and long-term performance. The case also highlights how such models can be further strengthened by integrating lifecycle cost and climate impact metrics. Together, these case studies demonstrate complementary approaches: Costa Rica shows how to institutionalise GPP within public systems, while India shows how to leverage scale and aggregation to drive market transformation.
Benefits	The study clearly demonstrates that Green Public Procurement can act as a powerful lever for market change in the cooling sector. The India case shows how aggregated demand can rapidly lower costs and expand the availability of efficient technologies, while the Costa Rica case demonstrates how strong policy frameworks can ensure long-term and consistent implementation. A key insight is that GPP enables public institutions to move beyond upfront cost considerations by applying lifecycle costing, resulting in lower total costs over time. At the same time, it drives innovation and supply chain development, encouraging manufacturers to offer more sustainable products.

	The study also highlights broader benefits, including reduced greenhouse gas emissions, improved energy efficiency, and stronger alignment between procurement practices and national climate goals. By strengthening institutional capacity and providing clear guidance, GPP improves the effectiveness and transparency of public spending.
Next steps	The project operated from 2016-2021 and build the foundation to equip countries with the tools, capacities, methods, and case studies to take action. The next step was to scale and replicate successful approaches such as Costa Rica's institutional GPP model and India's bulk procurement strategy. This includes strengthening policy frameworks, expanding capacity building for procurement practitioners, and promoting lifecycle-based evaluation methods. By combining strong institutions with innovative procurement approaches, countries can accelerate the widespread adoption of sustainable cooling technologies.
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