

# Thermal & Carbon efficiency



Earth Observation Support to improve urban planning

**Users:** City planners

**Need:** Reducing thermal waste, particularly over large areas or in large buildings, is vital in lowering global carbon emissions.

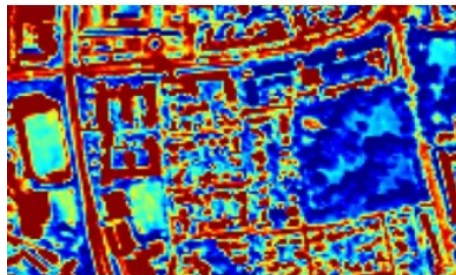


Fig. Thermal image of Munich, Germany (5m pixel resolution) illustrating thermal losses.

**Challenge:** ThermCERT addresses the need for a European policy concerning the improved energy efficiency of houses and buildings. It uses available ground-based data and merges it with thermal infrared satellite imaging to support the energy certification of buildings.

**Initiative:** ThermCERT uses space-derived data to enhance quality and scanning frequency over the lifetime of a thermal investment; increase the effectiveness of carbon credits/trading; and provide a suite of tools for targeting, measuring, reporting on, verifying, communicating, and promoting thermal efficiency investments.

**Results:** Provides cost-effective targeting of “worst offender areas” and tools to measure and maximise returns on thermal investments, including cash paybacks.

**Service provider:** Stevenson Astrosat [www.astrosat.biz](http://www.astrosat.biz)