TES vs BESS

	TES	BESS
Use and versatility	High: harnesses heat energy, which can be maintained as-is or converted into electricity	Low: exclusively uses electrical power
Energy density	**Varies** depending on the tech used in the project	**High**
Cost	**High initial investment,** but medium to low operating costs	**Moderate or high initial investment**, depending on the project size. Moderate maintenance costs due to battery degradation
Scalability	**High**: especially in large industrial projects and solar plants	**Medium**: suitable for domestic or grid scales with technological limitations
Efficiency	**High when releasing heat**, low when converting to electricity	**High**: notable for its rapid availability
Storage	**High**: varies from days to weeks depending on the technology used	**Medium-low**: ideal for hours of supply
Maturity level	**Medium**: rapidly developing technology, but low market adoption	**Medium-high**: technology widely introduced into the market
Environmental impact	**Low** if easily recyclable materials are chosen	**Medium** due to mining for materials such as lithium. Hard to recycle