

Review of: "Does energy always have mass?"

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I am not surprised that the author finds it difficult to deal with the potential energy of a capacitor. In fact, the problem is open. I would suggest looking in the literature for the "capacitor paradox". The definition is correct in stationary regimes, but does not adapt to dynamic cases. I don't think it's appropriate to invoke a mass shortage (too fancy and subject to criticism). However, the definition of potential energy needs revision.

For example, even very small variations in the state of charge of a capacitor can trigger an oscillatory dynamic which, in perfectly conservative situations, does not attenuate. This last form of energy must then be added to the general sum.

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