Supplemental Information for

Seebeck and Figure of Merit Enhancement by Rare Earth Doping in Yb$_{14-x}$RE$_x$ZnSb$_{11}$ (x = 0.5)

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Figure S1. Microprobe backscatter electron images of (a) Yb$_{13.5}$Y$_{0.5}$ZnSb$_{11}$ and (b) Yb$_{13.5}$La$_{0.5}$ZnSb$_{11}$. 

1 Yb$_{13.5}$Y$_{0.5}$ZnSb$_{11}$
2 Yb$_{13.5}$La$_{0.5}$ZnSb$_{11}$
Figure S2. Powder X-Ray diffraction patterns from samples of Yb$_{13.5}$Y$_{0.5}$ZnSb$_{11}$ and Yb$_{13.5}$La$_{0.5}$ZnSb$_{11}$. 
Figure S3. Electrical resistivity as a function of temperature for samples of Yb$_{13.5}$Y$_{0.5}$ZnSb$_{11}$, Yb$_{13.5}$La$_{0.5}$ZnSb$_{11}$ and Yb$_{14}$ZnSb$_{11}$ (data from Ref. 9).
Figure S4. Seebeck as a function of temperature for samples of $\text{Yb}_{13.5}\text{Y}_{0.5}\text{ZnSb}_{11}$, $\text{Yb}_{13.5}\text{La}_{0.5}\text{ZnSb}_{11}$ and $\text{Yb}_{14}\text{ZnSb}_{11}$ (data from Ref 9).
Figure S5. Total thermal conductivity and calculated lattice thermal conductivity as a function of temperature for samples of Yb_{13.5}Y_{0.5}ZnSb_{11}, Yb_{13.5}La_{0.5}ZnSb_{11} and Yb_{14}ZnSb_{11} (taken from Ref. 9).