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HEAT PUMP HEAT RECOVERY OPTIONS FOR FOOD INDUSTRY DRYERS

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Highlights

- air-to-air heat exchange (AHX) likely to be economic but limited to less than 20% of air heating
- AHX plus heat pump (HP) could provide up to 40% of air heating with 20% lower energy cost
- refrigerants with critical temperatures between 70-110°C & evaporating 25-30°C are most promising
- HP options attractive if capital costs are less than NZ\$300 kW⁻¹ of heating

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