# The Sundog SmartHouse: A Solution to Non Urban Low Income Housing Needs

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Sundog Solar, Inc.  Chatham NY

# Sundog - Who We Are

- Installers of
  - Solar Photovoltaic

# Sundog - Who We Are

- Installers of
  - Solar Thermal (Hot Water)

# Sundog - Who We Are

- Installers of
  - Closed Cell Spray Foam Insulation

# Sundog - Who We Are

- Manufactures of
  - Smart Houses

# Sundog - Who We Are

- Manufactures of
  - Solar Power Stations

# Sundog - Who We Are

- Manufactures of
  - Renewable Energy Trainers

*The Pup features solar thermal loads and a roof section that demonstrates attachment methods.*

# Sundog – What We've Accomplished

- 20,000 square foot Carbon Neutral Building

# Sundog – What We've Accomplished

- Upstate New York's ONLY Solar Thermal Air Conditioner

# Sundog – What We've Accomplished

- 127 kW of Solar Photovoltaics Installed

# Sundog – What We've Accomplished

- Installation of Vegetable Oil Boiler

# Sundog – What We've Accomplished

- Installation of Closed Cell Foam on Outside of Building

# Sundog – What We've Accomplished

- Building Battery Back Up

# Sundog – What We've Accomplished

- Converted Solar Installation Vehicle to run on Veggie Oil.

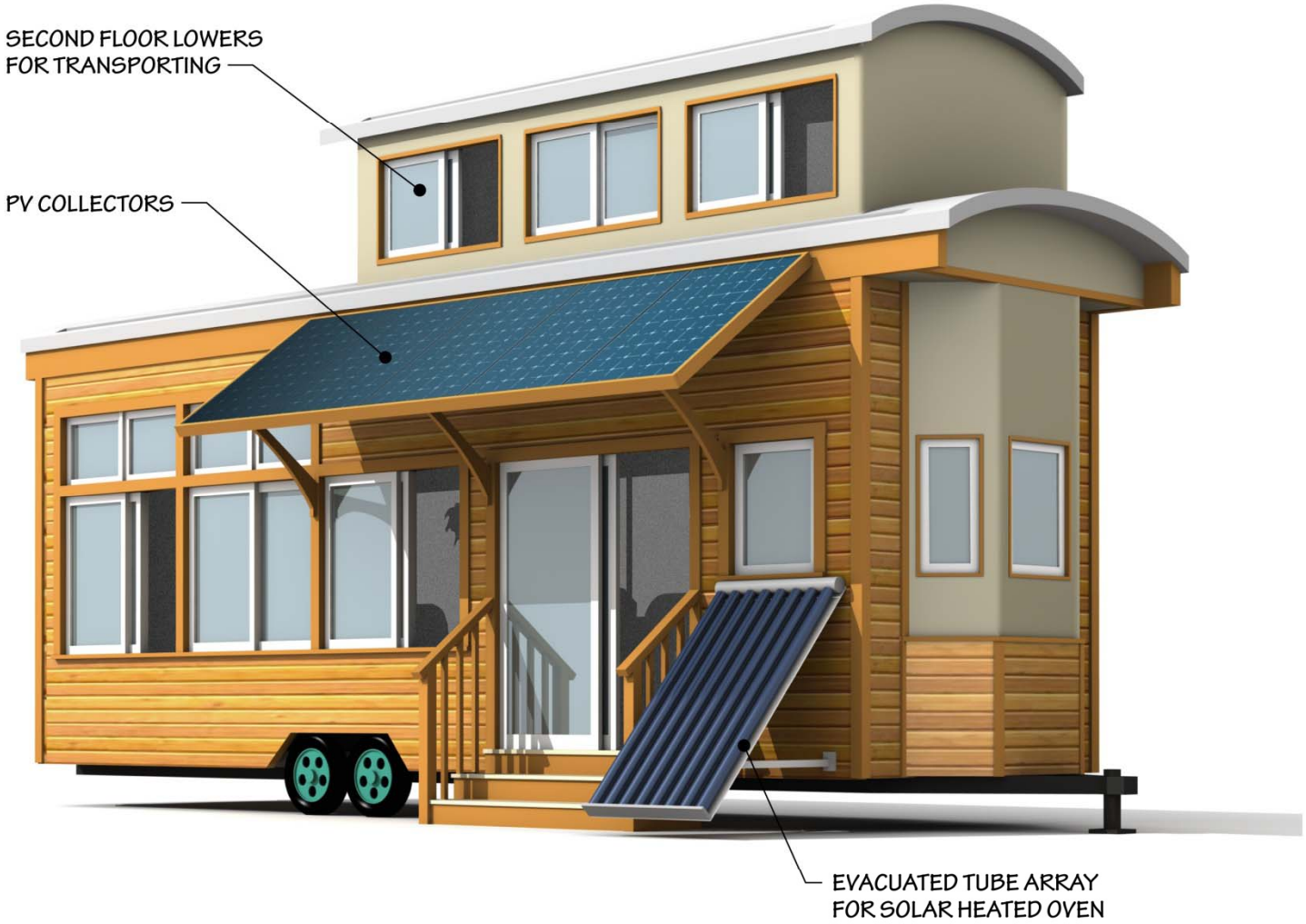
# Sundog – What We've Accomplished

- NYSERDA Sponsored Solar Thermal Test Station

# How to Build a House for Non-Urban Low Income Families

- Superior Insulation – Closed Cell Foam
- Photovoltaic Roof/Awning and Battery Storage.
- Solar hot water heater with electric back up.
- LED Lighting
- Energy Efficient Widows And Appliances
- Space Saving Design
- Position Appropriately

# SundogSmartHouse



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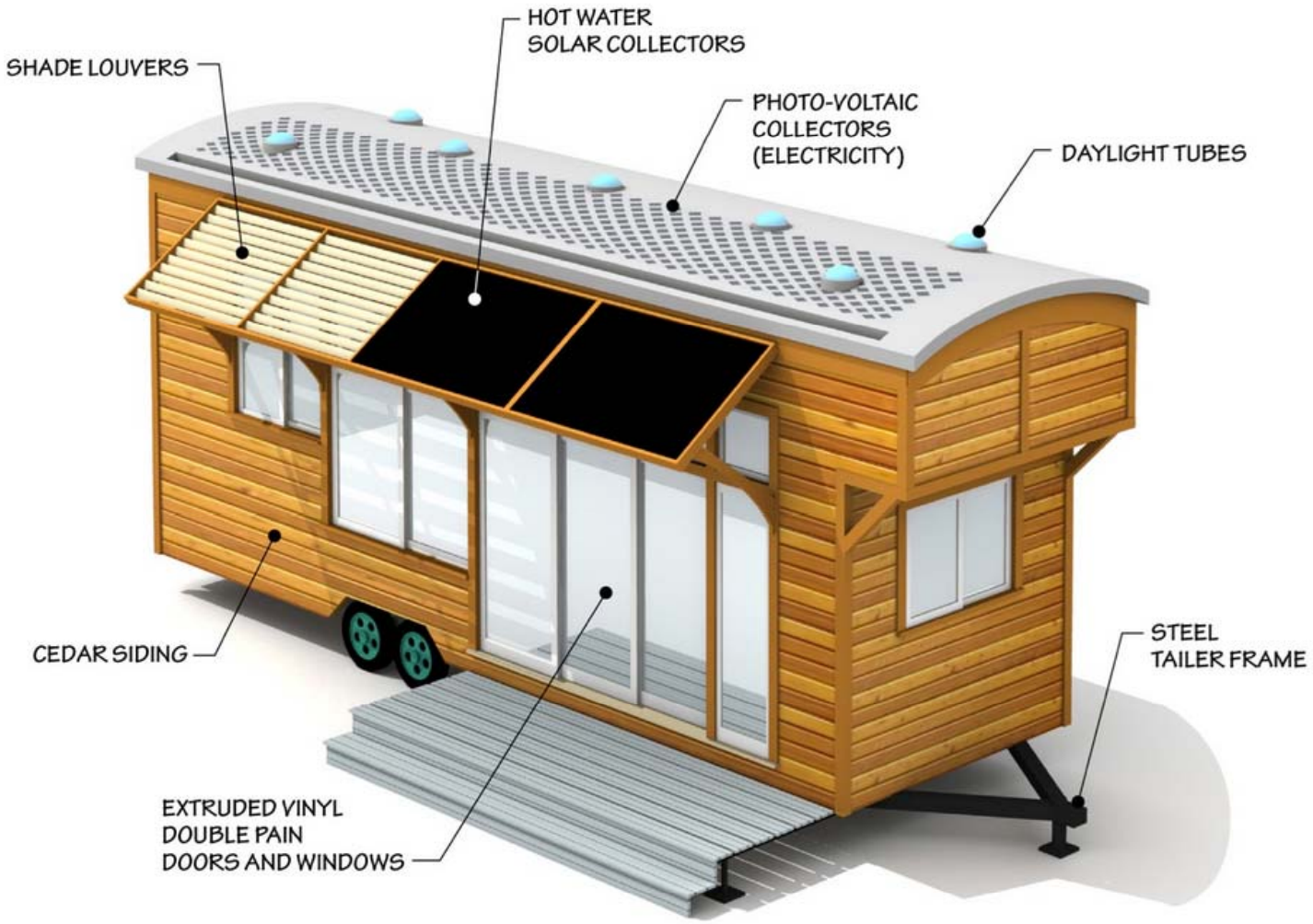
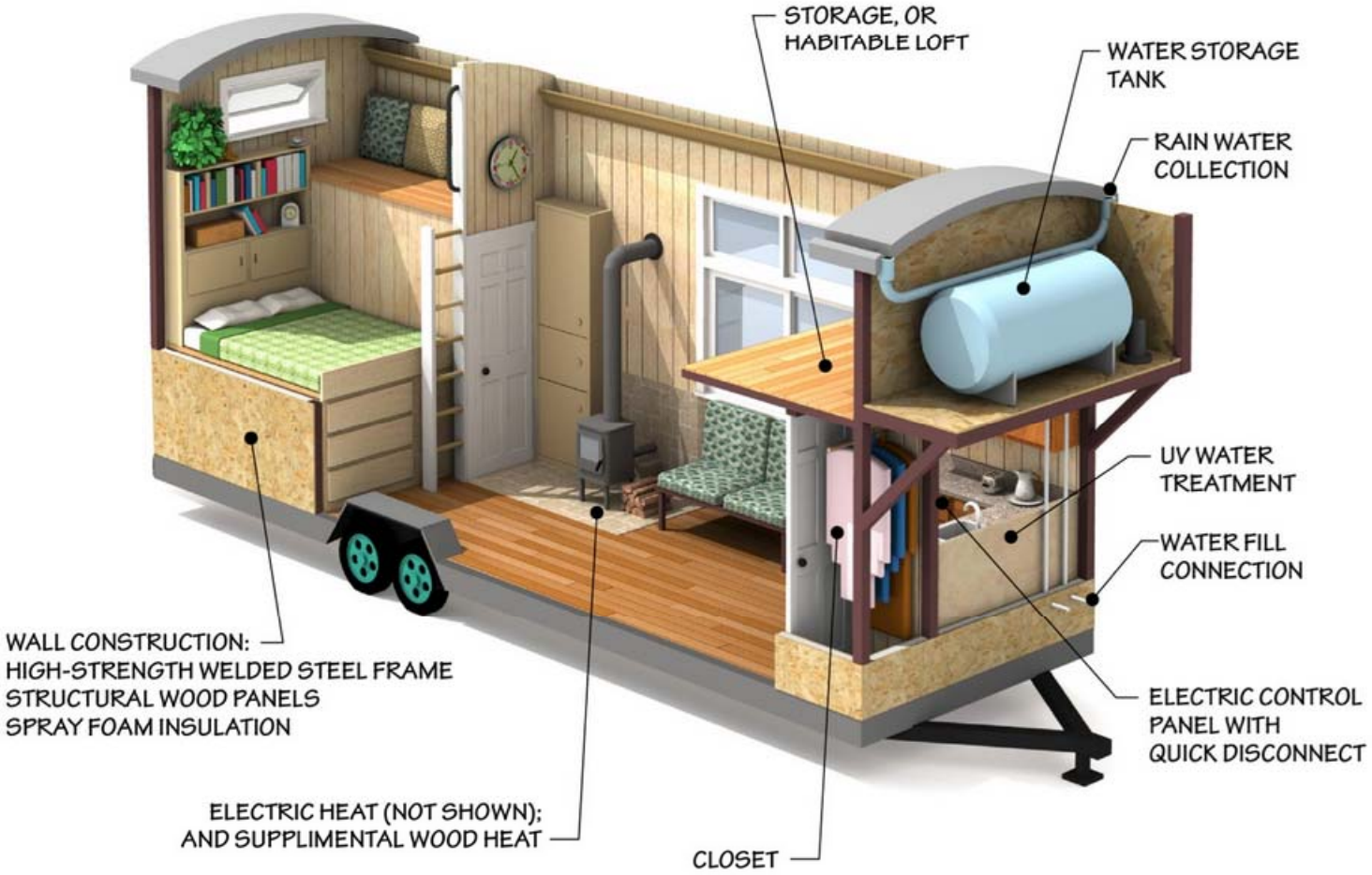



ILLUSTRATIONS/ANIMATION BY TERREL BROILES

# SundogSmartHouse

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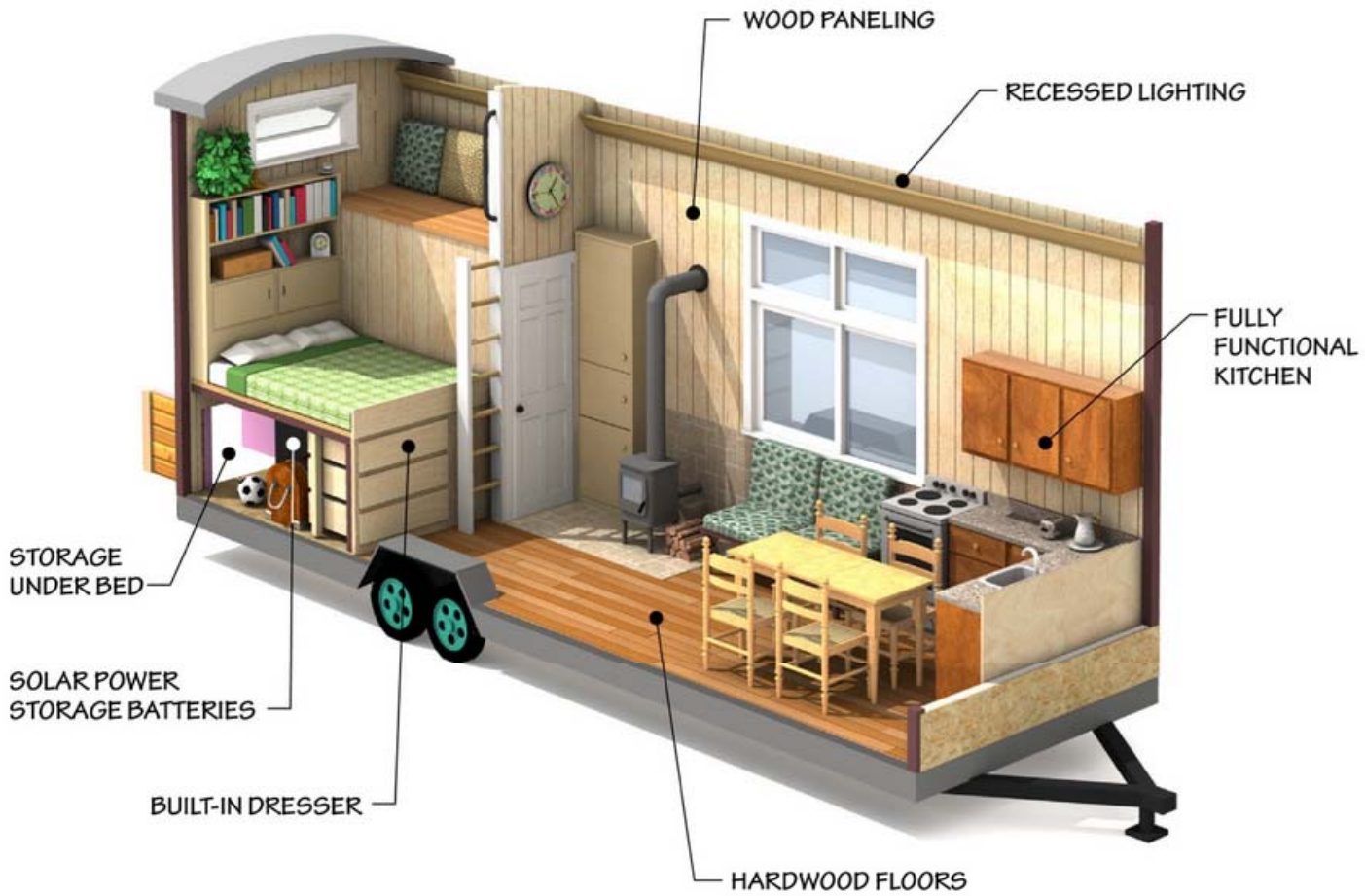


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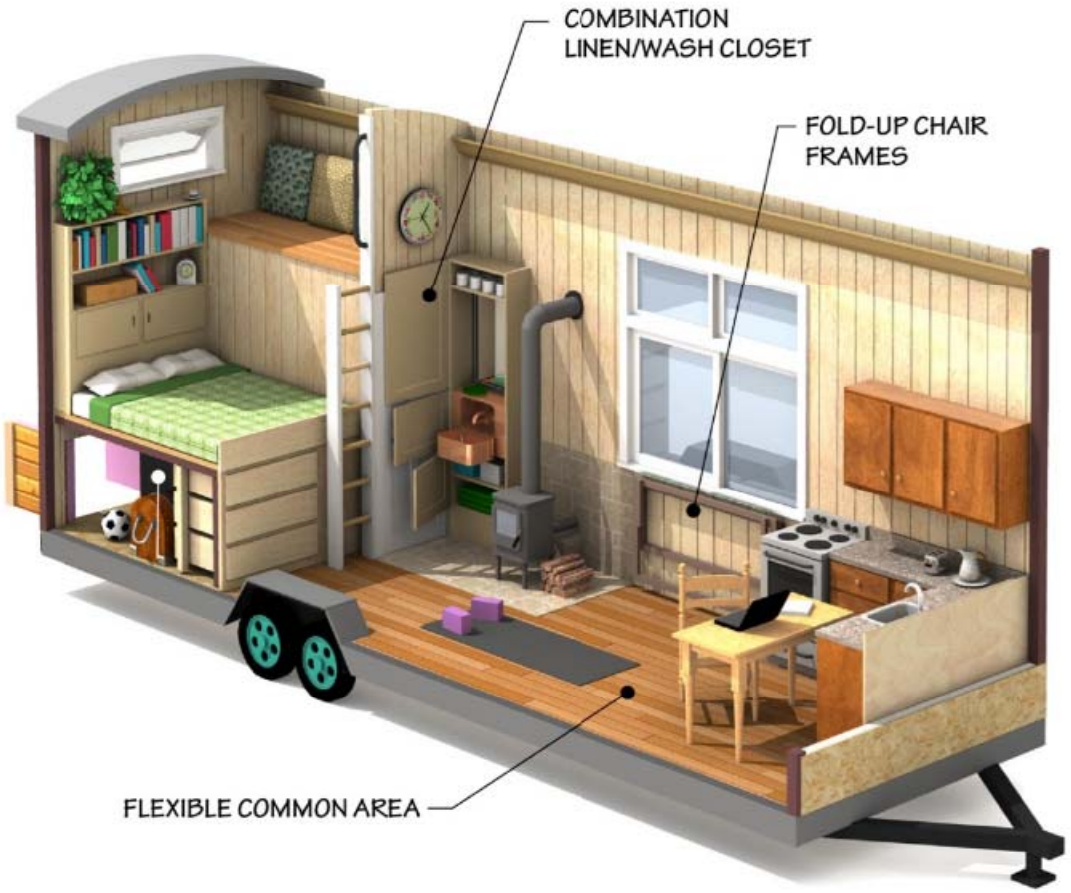


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# Summary – We Can Transform the Double Wide

- Insulation
- Windows
- Heating
- Renewable Energy Systems
  - Solar Photovoltaic
  - Solar Hot Water