

# "Greening" the new Arcola Theatre

In our renovations we are installing systems which may not always be visible to visitors, but help make the theatre more comfortable and user-friendly. They also help move Arcola towards being the world's first carbon neutral theatre.



## **Waste Wood Heating System**

- Built around a 60kW log-fired boiler system with solar thermal water heating for the summer.
- Under-floor heating in the basement and radiators on other floors will effectively warm the spaces.
- We hope to feed the boiler with locally sourced waste wood (clean and untreated) to divert this material from landfill.
- For more information, check out the latest Green Arcola Newsletter (http://www.arcolaenergy.com/documents/newsletter/GreenArcolaNewsSept2012.htm)

#### Natural Ventilation system in Studio 1 / Studio

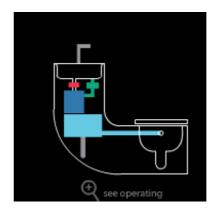
- Drawing cool air from the below-street-level lightwell which encompasses the building, through a system of vents to exclude noise.
- Air will circulate through the spaces and out through a small chimney. There will be a small fan in the chimney to aid air circulation when necessary.
- The system will be quiet and use far less energy than air-conditioning.
- In winter, very cold air will be heated slightly as it enters the spaces, so no cold draughts!



### **Direct Current (DC) Microgrid and Low-energy Lighting**

- Using electricity generated by our solar panels directly in the building for low-energy LED lighting in offices, bar, foyer and dressing rooms and to power modern appliances including laptops and mobile phones
- DC electricity is low voltage 24v compared to mains alternating current 240v so much safer to use.
- There will be DC charging hubs in the bar and foyer for visitors to use





#### **Water Saving Toilets**

- Water from the wash basin is collected, filtered, purified and reused for flushing the toilet.
- The tap has water-saving features.