Choosing ULS 2 over No. 4  
Hidden Costs and Surprising Opportunities

With No. 6 oil being phased out of New York City’s heating systems by 2015; many oil customers need to decide between switching to No. 4 or ultra-low sulfur No. 2 (ULS 2) heating oils. Price per gallon and BTU value are important factors but only part of the equation. Savvy building managers also consider system efficiencies, maintenance budgets, occupant comfort, and City and State regulations when choosing cleaner heating oils.

The Hidden Costs of No. 4  
The Problem: Soot accumulates within the boiler when burning No. 4. This causes decreased heat transfer and reduced efficiency in between boiler maintenance visits.

The Result: More gallons of oil need to be burned for the same amount of heat that a clean boiler would produce.

- The price of No. 4 has been on an upward trend¹ in 2013, possibly as a result of the shrinking market for No. 6 oil. No. 4 is becoming a rarer “boutique” fuel since it is a blend of No. 6 oil and ULS 2.
- No. 4 may exhibit less consistent fuel quality because blends vary between batches.
- Soot build-up due to the use of No. 6 oil in the No. 4 fuel blend² may lead to increased maintenance and operations costs.
- As of January of 2013, No. 4 oil was more expensive than No. 2 oil on the Platts index.
- The electricity used to pre-heat No. 4 per burner can add a cost of ~$0.10 per gallon burned.

Visit nyc.gov/cleanheat for more information or contact NYC Clean Heat by calling 311 or sending an email to info@nyccleanheat.org.
Opportunities for ULS 2

Run a cleaner system: Due to regulations enacted in 2012, ULS 2 is now one of the cleanest fuels you can use in your heating system.

- ULS 2 is a higher quality fuel that is more consistent between batches.
- Burn less fuel annually because your system will avoid the soot build-up inefficiencies associated with No. 4 (see Case Study below). Efficient fuel compensates for the difference in BTU values between No. 4 and ULS 2.
- Burning a cleaner fuel allows you to use more advanced and efficient equipment to optimize your energy usage.
- The higher quality of ULS 2 provides more occupant comfort and less residential complaints.
- Reduce maintenance and operations costs.
- Help improve quality of life in your community by virtually eliminating the harmful soot pollution that can cause cardio-vascular diseases from your heating system.

Case Study: 910 Park Avenue

This 25-unit co-op started burning ultra-low sulfur 2 oil (ULS 2) in October 2010. Even though the 2010/2011 winter had more heating degree days, the building burned only 24,500 gallons of No. 2 oil, compared to 27,000 gallons of No. 6 oil burned during the 2009/2010 winter. The building reduced its fuel despite ULS 2 containing fewer BTUs per gallon than No. 6 oil. Experts believe that fuel consumption was reduced because ULS 2 burns much cleaner which increases heat transfer and therefore fewer gallons of oil are needed to make the same amount of steam.

Cash in on New York State’s biodiesel tax credit! For each percentage of biodiesel purchased, a building will receive a one cent tax credit per gallon. For example, a B10 blend (10% biodiesel and 90% ULS 2) receives a 10 cents/gallon tax credit. 20 cents/gallon is the maximum amount available for the New York State biodiesel tax credit.

Need to replace a major piece of equipment like a tank or a burner? NYC Clean Heat can connect you to financial partners for loans, leasing, and credit enhancement. Plus, buildings converting directly to ULS 2 avoid the need for switching fuel twice.

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ii Platts pricing, January and February 2013

iii No 4 oil is a blend of No. 6 and ULS 2 oil. The two oils can separate in the tank allowing the impurities of the No. 6 oil to clog the burner requiring a service call.

iv Almost 10% fuel savings despite winter ‘10/11 having 7% more heating degree days compared to winter ’09/’10. For details on this case study, go to http://www.nycleanheat.org/content/case-studies-and-testimonials.

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