

TWO BY TWO, IN MANY COLORS

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From July until late September 2005, proponents of diesel power argued against those who championed compressed natural gas fuel for Vancouver's next order of new busses. Diesel proponents pointed out that busses with particulate traps burning low-sulphur diesel fuel emit nearly as low emissions as CNG-powered busses and are considerably cheaper; their opponents say that CNG is still cleaner and is the fuel of the future. TransLink staff had recommended diesel power but after hearing a series of sales pitches from representatives of Terasen Gas and allied firms, the board of directors met in July and selected CNG power. Subsequently North Vancouver mayor Barbara Sharp introduced a motion to switch the order to diesel. At its September meeting though, the board voted 7 to 5 against diesels. "Diesel is diesel," sniffed Vancouver mayor Larry Campbell. "It is still an unclean fuel." But Doug McCallum, mayor of Surrey and TransLink chairman, disagreed. "There's a lot of conflicting research out there," he said, adding that CNG technology needs more study. TransLink will be buying 1000 busses over the next eight years and McCallum urged it to stay with proven technology. Campbell and McCallum have disagreed on other issues, with Campbell charging that Surrey repeatedly approves sprawling residential developments and office parks that are difficult to serve by transit.

TransLink budgeted \$48.2 million for this year's installment of the 1000-bus order, a sum that is buying 94 CNG-powered busses. The same dollar amount would have bought 105 diesels. Critics pointed out that buying modern diesels would have been the fastest way of replacing the older, pollution-prone diesel busses. In addition \$9 million will be required for upgrading CNG fuelling facilities at TransLink's (Port) Coquitlam garage where the new busses will be housed. Older diesel busses now at Coquitlam will be reassigned, a move that made McCallum unhappy. "All the old busses will go to other parts of the region. I'm not sure that's fair," he stated.

To be explicitly fair however, TransLink has begun a 6-month test to compare propulsion technologies and fuels. The results will guide the agency in its future orders for the 1000 busses. Four different fuels and propulsion systems are being evaluated with two busses in each category, each pair painted different vivid colors. Two diesel-electric hybrids are green with black stripes while two biodiesel-fuelled busses, burning a mixture of 20 percent biodiesel and 80 percent standard diesel, are orange. Two purple busses use low-sulphur diesel and have the latest particulate filters, while a red one burns CNG fuel. In addition, two gray busses using conventional diesel will be analyzed for comparison. "We're looking for busses that are a good fit for the unique weather and terrain of Vancouver," said Doug McCallum. The test busses will operate primarily in TransLink's Tri-Cities area, Maple Ridge and Burnaby, and passengers travelling aboard them will be interviewed for their opinions. "There's a lot of conflicting information out there about the relative merits of the two technologies [CNG and diesel]," said Ken Hardie, a TransLink official, "It really became clear we had to collect our own data." Hardie added that all 1000 busses would not necessarily use the same fuel or propulsion. "It's not a winner takes-all proposition," he said. Later, federal funding will partially underwrite tests involving a blend of CNG and recycled hydrogen. More tests are also planned with diesel-electric hybrids employing different propulsion systems.