



Unit 5

Reusable Oil Filters

Baseline: Throw-Away Filters

- U.S. businesses discard over 400 million used oil filters every year
- Even after crushing, these filters contain about 3 million gallons of oil
- Fleet facilities incur costs to:
 - maintain inventory
 - manage & dispose of used oil filters



P2 Alternative: Reusable Oil Filter



Making It Work

Purchasing and Use

- **Commonly used for large vehicles such as trucks and vans**
- **Adapter plate varies to fit engine types and filter inserts vary according to vehicle size**
- **Wire cloth filter must be cleaned in parts washer (5 – 15 minute job)**

Cost and Payback

- **Small trucks and vehicles: \$65 to \$90**
- **Large trucks, vans, and buses: \$120 to \$240**
- **Payback : 1 to 3 years**
 - **Depends on fleet size and oil change cycles**
 - **Savings: from lower purchase and disposal costs for conventional oil filters**

Case Study 1:

Barton Sand and Gravel

- **Fleet Size = 100 trucks; 40 trucks use PureCycle reusable oil filters**
- **Clean filters during every oil change (every 6,000 to 7,000 miles)**
- **Use PureCycle washing machine to clean filters (takes 10 minutes)**
- **Payback: <2 years Annual Savings: ~\$4100**

Case Study 2: City of Walnut Creek

- **Fleet size = 290 vehicles; 10 of 18 police cars**
- **Before:**
 - **12 changes/vehicle/year**
 - **Conventional filter costs: \$450 per year**
 - **Disposal costs: not quantified**
- **After**
 - **Filter costs (10 @ \$80/piece): \$800**
 - **Filter cleaning: 5 minutes**
- **Payback: < 2 years Annual Savings: ~\$450**

Take Home Messages

- **A great option after other low-hanging P2 fruit are picked!**
- **Comparable (or better) filter performance**
- **Cost-effective – particularly for vehicles with frequent oil changes**

