

APPENDIX H: TARGETED MATERIAL BENCHMARKS: ESTIMATED COSTS AND REVENUE

ARD COST/PROFIT SUMMARY
 TARGETED MATERIAL BENCHMARKS
 **(All costs/profits are per pound unless otherwise noted)

Seat Foam Recycling Costs/Revenues

| | Disassembly | Intermediate Shipping | Cleanup | Processing | Shipping | Total Cost |
|-----------------------------|-------------|-----------------------|---------|------------|----------|------------|
| Study Results | \$0.115 | \$0.000 | \$0.050 | \$0.120 | \$0.012 | \$0.297 |
| Gypsy Harvesting | \$0.063 | \$0.036 | \$0.050 | \$0.108 | \$0.012 | \$0.269 |
| Integrated Super Processing | \$0.052 | \$0.000 | \$0.045 | \$0.108 | \$0.012 | \$0.217 |

Seat Foam Recycling Costs/Revenues

| | Total Cost | End Market Revenue - Low | End Market Revenue High | Net Profit Low | Net Profit High | Profit per Hour* |
|-----------------------------|------------|--------------------------|-------------------------|----------------|-----------------|------------------|
| Study Results | \$0.30 | \$0.15 | \$0.35 | (\$0.15) | \$0.053 | \$1.04 |
| Gypsy Harvesting | \$0.27 | \$0.15 | \$0.35 | (\$0.12) | \$0.081 | \$1.59 |
| Integrated Super Processing | \$0.22 | \$0.15 | \$0.35 | (\$0.07) | \$0.133 | \$2.62 |

Plastic Recycling Costs/Revenues

| | Disassembly | Intermediate Shipping | Sorting/ID/ Decontamination | Processing | Shipping | Total Cost |
|-----------------------------|-------------|-----------------------|-----------------------------|------------|----------|------------|
| Study Results | \$0.013 | \$0.000 | \$0.270 | \$0.120 | \$0.012 | \$0.415 |
| Easy Removal | \$0.085 | \$0.000 | \$0.270 | \$0.120 | \$0.012 | \$0.487 |
| Difficult Removal | | | | | | |
| Gypsy Harvesting | | | | | | |
| Easy Removal | \$0.011 | \$0.036 | \$0.162 | \$0.108 | \$0.012 | \$0.329 |
| Difficult Removal | \$0.059 | \$0.036 | \$0.162 | \$0.108 | \$0.012 | \$0.377 |
| Integrated Super Processing | | | | | | |
| Easy Removal | \$0.009 | \$0.000 | \$0.216 | \$0.108 | \$0.012 | \$0.345 |
| Difficult Removal | \$0.055 | \$0.000 | \$0.189 | \$0.108 | \$0.012 | \$0.364 |

Plastic Recycling Costs/Revenues

| | Total Cost | End Market Revenue - Low | End Market Revenue High | Net Profit Low | Net Profit High | Profit per Hour* |
|-----------------------------|------------|--------------------------|-------------------------|----------------|-----------------|------------------|
| Study Results | | | | | | |
| Easy Removal | \$0.415 | \$0.180 | \$0.400 | (\$0.235) | (\$0.015) | (\$0.421) |
| Difficult Removal | \$0.487 | \$0.180 | \$0.400 | (\$0.307) | (\$0.087) | (\$1.659) |
| Gypsy Harvesting | | | | | | |
| Easy Removal | \$0.329 | \$0.180 | \$0.400 | (\$0.149) | \$0.071 | \$1.976 |
| Difficult Removal | \$0.377 | \$0.180 | \$0.400 | (\$0.197) | \$0.023 | \$0.433 |
| Integrated Super Processing | | | | | | |
| Easy Removal | \$0.345 | \$0.180 | \$0.400 | (\$0.165) | \$0.055 | \$1.515 |
| Difficult Removal | \$0.364 | \$0.180 | \$0.400 | (\$0.184) | \$0.036 | \$0.686 |

Elastomer Recycling Costs/Revenues Study Results

| | Disassembly | Intermediate Shipping | Sorting/ID | Processing- Decontamination | Shipping | Total Cost |
|-----------------------------|-------------|-----------------------|------------|-----------------------------|----------|------------|
| Easy Removal | \$0.046 | | \$0.090 | \$0.120 | \$0.012 | \$0.268 |
| Difficult Removal | \$0.133 | | \$0.090 | \$0.120 | \$0.012 | \$0.355 |
| Gypsy Harvesting | | | | | | |
| Easy Removal | \$0.030 | | \$0.070 | \$0.108 | \$0.012 | \$0.220 |
| Difficult Removal | \$0.100 | | \$0.078 | \$0.108 | \$0.012 | \$0.298 |
| Integrated Super Processing | | | | | | |
| Easy Removal | \$0.030 | | \$0.070 | \$0.108 | \$0.012 | \$0.220 |
| Difficult Removal | \$0.093 | | \$0.074 | \$0.108 | \$0.012 | \$0.287 |

Elastomer Recycling Costs/Revenues Study Results

| | Total Cost | End Market Revenue - Low | End Market Revenue High | Net Profit Low | Net Profit High | Profit per Hour* |
|-----------------------------|------------|--------------------------|-------------------------|----------------|-----------------|------------------|
| Easy Removal | \$0.268 | \$0.250 | \$0.500 | (\$0.018) | \$0.232 | \$2.734 |
| Difficult Removal | \$0.355 | \$0.250 | \$0.500 | (\$0.105) | \$0.145 | \$1.066 |
| Gypsy Harvesting | | | | | | |
| Easy Removal | \$0.220 | \$0.250 | \$0.500 | \$0.030 | \$0.280 | \$3.302 |
| Difficult Removal | \$0.298 | \$0.250 | \$0.500 | (\$0.048) | \$0.202 | \$1.487 |
| Integrated Super Processing | | | | | | |
| Easy Removal | \$0.220 | \$0.250 | \$0.500 | \$0.030 | \$0.280 | \$3.302 |
| Difficult Removal | \$0.287 | \$0.250 | \$0.500 | (\$0.037) | \$0.213 | \$1.565 |

*Note: Profit per vehicle is the total weight of targeted material present in a typical car times the high net cost/profit. This gives the approximate dollar value per car of the retrieved material.

| | | ASSUMPTIONS: | Plastic | Seat Foam | Elastomer |
|---|-----------------------------|--------------------|---------|-----------|-----------|
| Total Profit (Loss) per hour | | Labor | \$15.00 | \$15.00 | \$15.00 |
| Gypsy Harvesting - easy | \$6.86 (includes seat foam) | Recoverable Weight | 67% | 67% | 67% |
| Gypsy Harvesting - difficult | \$1.92 | Easy/Difficult | 750 | N/A | 200 |
| Integrated Super Processing - easy | \$7.44 (includes seat foam) | Threshold-lbs | | | |
| Integrated Super Processing - difficult | \$2.25 | | | | |