

$$\frac{(p+f)}{a^n} = e$$

Pfane
INCORPORATED

| Total kgCO2 Spend /TON | CO2 Footprint Of Recycling PCB Manufacturing Waste PER TON | | | | | |
|--|---|---|--|---|---|--|
| *Saving Potential /ton recyclables | Collector | Recycler (broker) | Processor | Incineration | Gasification | Pfane |
| 2014.3 | Potential CO2 Savings | Potential CO2 Savings | Potential CO2 Savings | Potential CO2 Savings | Potential CO2 Savings | Potential CO2 Savings |
| Shipping =<1000km kgCO2 Cost 880 | 2014.3 Ships From You 880 | 2014.3 Ships From You 880 | 2014.3 Ships To Processor 880 | 2014.3 Ships To Incinerator 880 | 2014.3 Ships To Incinerator 880 | 2014.3 Ships To Pfane 880 |
| Recycling kgCO2 Cost | Ships To Processor 880 | Ships To Processor 880 | Processor Granulates 130 | Incineration Process 1380 | Gasification Process 180 | Recycling Process 64 |
| Granulation / Metal separation 130 | Processor Granulates 130 | Processor Granulates 130 | Ships Granules to Refiner 880 | Burn NonMetals 770 | Final Fuel Product 30% 1560 | Brick Making 11 |
| Metal Refining (Cu, Au, Ag) 440 | Ships Granules to Refiner 880 | Ships Granules to Refiner 880 | Refining Process 440 | Landfil Ash 880 | Burn NonMetals 770 | Metal Refining (Using EcoCell) 0 |
| Incineration CO2 Output 1380 | Refining Process 440 | Refining Process 440 | Landfill NonMetal 880+770 1650 | | Landfil Ash 880 | |
| Gasification CO2 Output 180 | Landfill NonMetal 880+770 1650 | Landfill NonMetal 880+770 1650 | | | | |
| Fuel Burning Output 1560 | CARBON FOOTPRINT -2845.7 | CARBON FOOTPRINT -2845.7 | CARBON FOOTPRINT -1965.7 | CARBON FOOTPRINT -1895.7 | CARBON FOOTPRINT -2255.7 | CARBON SAVINGS 1059.3 |
| Fuel Extracted (aprox. 30%) Potential For Sand Replacement Using Non Metalics 770 | 2.8tons of CO2 Enters The Atmosphere For Every Ton Of Your Manufacturing Waste Recycled This Way | 2.8tons of CO2 Enters The Atmosphere For Every Ton Of Your Manufacturing Waste Recycled This Way | 1.035 tons of CO2 Enters The Atmosphere For Every Ton Of Your Manufacturing Waste Recycled This Way | 1.9tons of CO2 Enters The Atmosphere For Every Ton Of Your Manufacturing Waste Recycled This Way | 2.3tons of CO2 Enters The Atmosphere For Every Ton Of Your Manufacturing Waste Recycled This Way | 1ton CO2 IS SAVED FROM ENTERING OUR ATMOSPHERE FOR EVERY TON OF PCB / MANUFACTURING WASTE TREATED |

*Savings Potential Calculated difference between CO2 generated by Recycling Both Raw Materials as opposed to Mining New Materials