

## A less-pollution, more-jobs land use policy to make Richmond a Green Zone

Bad policies that have allowed high-emission, low-jobs industries to concentrate in Richmond are stealing the communities' health and wealth. Now a new community-based land use policy that could bring cleaner industries and more jobs to Richmond has won unanimous support from the Richmond Planning Commission (1). Richmond residents can make this vision real and win healthier, more prosperous communities for our children if we join together and support our City Council to adopt this commitment to less pollution and more jobs in the City's General Plan.

### Problem: More pollution *and* fewer jobs.

Pollution and blight from a concentration of high-emission, low-jobs industries contribute to severe cumulative impacts on health in Richmond's low income communities of color. (See Chart 1).

For example, PM<sub>2.5</sub> air pollution is worse in Richmond than upwind (in Bolinas) and we can't escape it, even in our homes (Chart 2). PM<sub>2.5</sub> exposure causes breathing and heart problems and contributes to thousands of premature deaths in the Bay Area each year (2, 3). Even in summer, when PM<sub>2.5</sub> levels are generally lowest, PM<sub>2.5</sub> exceeds California's annual ambient air quality standard in nearly half of the homes tested in Richmond's Atchison and Liberty villages (2).

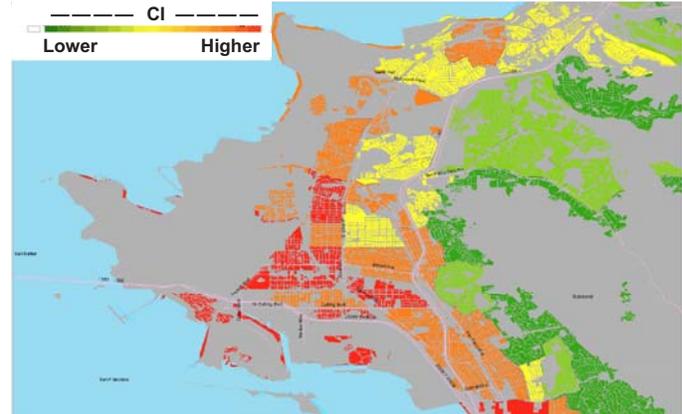
Chemical "fingerprints" link Richmond's high outdoor and indoor air pollution to heavy oil burning at the Richmond refinery and port (2). Per capita emissions from industrial fossil fuel burning are higher in Richmond than regional or statewide averages — nearly ten times higher for PM<sub>2.5</sub> and greenhouse gases — and this drives higher total per capita emissions in Richmond (charts 3 and 4). But oil refining employs roughly ten times fewer people per dollar gross revenue than the average for all businesses in the statewide economy (4). Overall, these high emission fossil industries create fewer jobs (Chart 5).

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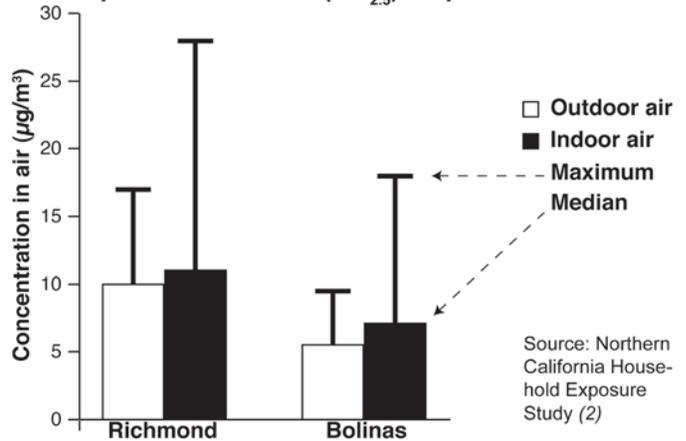


### 1. Total cumulative impact (CI) score, Richmond, CA

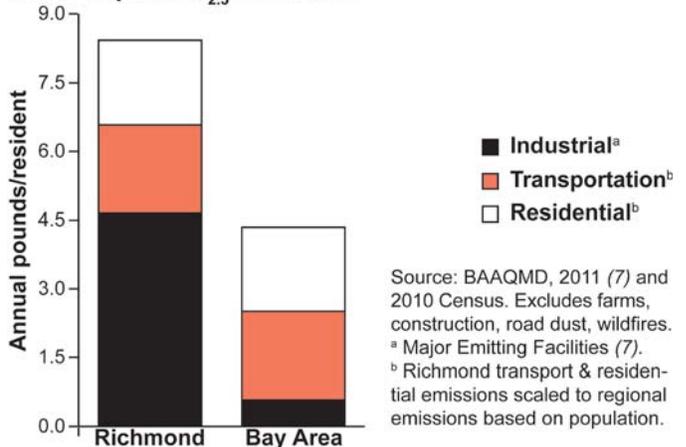
Source: California Environmental Justice Alliance (6)



### 2. Fine particulate matter (PM<sub>2.5</sub>) air pollution



### 3. Per capita PM<sub>2.5</sub> emissions



**Solution: Cleaner industry and more jobs.**

Cleaner local industry is the solution to our challenge to reduce pollution and increase jobs in Richmond.

Low-emission “green” industries must grow to avoid catastrophic climate change (5) and these same industries create more jobs per dollar economic activity than the high-emission fossil industries that are concentrated in Richmond now (Chart 5). It is clear that we must cut industrial emissions in Richmond to meet climate protection targets here (Chart 6). And if we do our part to protect climate here, in Richmond, our children can have less pollution *and* more jobs. Instead of the red, orange and yellow impact zones in Chart 1, all of Richmond can be a Green Zone.

**Challenge: Richmond must lead here and now.**

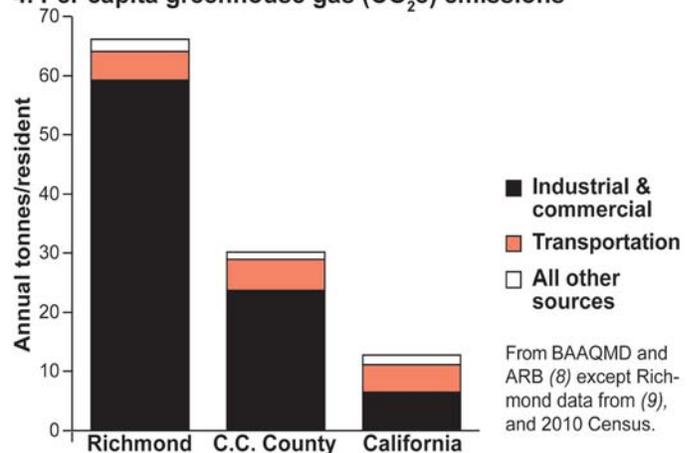
State and federal pollution trading policies *allow* polluters to avoid clean up here by promising to clean up somewhere else. They threaten to make our communities dumping grounds for even more pollution and blight while the clean up and the green jobs bypass Richmond. We need to act at the local level here.

Our community-based action plan has won Richmond Planning Commission approval:

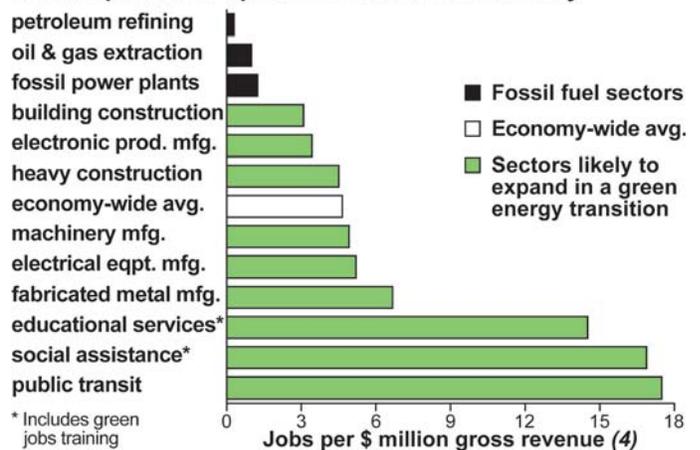
- Use local land use authority to attract lower-emission, higher-jobs business & technology;
- Apply feasible least-emitting technology criteria to major industrial projects; and
- Support meaningful community participation in this transition to a healthier Richmond (1).

**Join us to ensure that the City Council will include this commitment to less pollution and more jobs in the Richmond General Plan!**

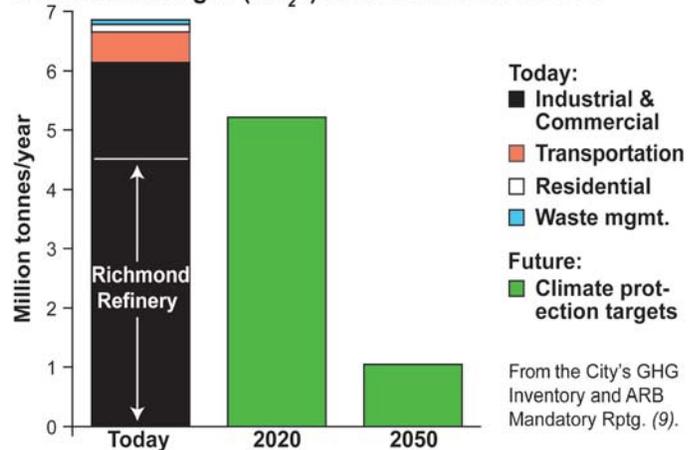
**4. Per capita greenhouse gas (CO<sub>2</sub>e) emissions**



**5. Jobs per dollar spent in California's economy**



**6. Greenhouse gas (CO<sub>2</sub>e) emissions in Richmond**



1. Policy EC1.1 and actions EC1.A and EC1.D proposed by the Richmond Planning Commission in Resolution No. 11-20.  
 2. Northern California Household Exposure Study. Brody et al., 2009. *Am. J. Public Health* doi:10.2105/AJPH.2008.149088.  
 3. BAAQMD, 2010. Multi-Pollutant Analysis for the 2010 Bay Area Clean Air Plan.  
 4. Paid employees/\$ million sales, shipments, receipts, revenue or other business done; U.S. Economic Census data 1992–2007.  
 5. Williams et al., 2011. *Science* doi:10.1126/science.1208365; Meinschausen et al., 2009. *Nature* doi:10.1038/nature08017.  
 6. Sadd, J.; Pastor, M.; Morello-Frosch, R., 2011. Analysis for the California Environmental Justice Alliance (CEJA).  
 7. BAAQMD, 2011. Base Year 2008 Bay Area Emissions Inventory Summary Report. See pp. 24–26 and Table 5.  
 8. ARB GHG Inventory (California, 2008); and BAAQMD Source Inventory of GHG Emissions (C.C. County, 2007).  
 9. City of Richmond 2005 GHG Inventory except Chevron refinery emissions in 2009 from ARB Mandatory GHG Reporting.