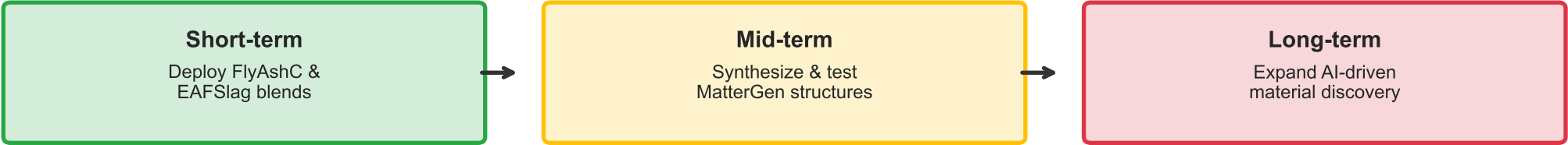# Research Outcomes and Recommendations

**Key Findings:**

1. Screened 16 industrial waste candidates using CHGNet

2. Identified Top 5: FlyAshC (90.3), EAFSlag (89.4), WasteGlass (84.7)

3. Generated 32 novel structures with MatterGen (26 valid compositions)

4. Best MatterGen structure: $Ca_2Si_2O_6$ (E/atom = -7.82 eV)

| **Short-term** | | **Mid-term** | | **Long-term** |
|---|---|---|---|---|
| Deploy FlyAshC & EAFSlag blends | → | Synthesize & test MatterGen structures | → | Expand AI-driven material discovery |

**Expected CO2 Reduction:**

| FlyAshC | EAFSlag | WasteGlass | MatterGen |
|---|---|---|---|
| 75% | 77% | 85% | 90% |