



WS 2

**DATE:** March 10, 2009

**TO:** Mayor and City Council  
Planning Commission

**FROM:** Development Services Director

**SUBJECT:** Joint Work Session to Introduce the Draft Climate Action Plan

### **RECOMMENDATION**

That the City Council and the Planning Commission read and comment on this report and the City's Draft Climate Action Plan.

### **SUMMARY**

The purpose of the work session is to present the draft Climate Action Plan (CAP) to the City Council and the Planning Commission, and for staff to receive comments and direction regarding the preparation of the final CAP. After approximately one year of preparation, staff has released a draft of the CAP. The CAP includes information about Hayward's current greenhouse gas (GHG) emissions, short and long term targets for reducing those emissions, and a prioritized list of actions needed to be taken to achieve the targets. Implementation of the CAP will require a significant commitment from both the City as well as from the community in terms of time, effort, and funding. The Plan includes a GHG reduction target for the year 2050, so the document addresses a longer timeframe compared to plans typically prepared by a local government. Regular updates to the Plan will be necessary as new technologies emerge and progress toward meeting the reduction targets is measured.

### **BACKGROUND**

When the City joined the Alameda County Climate Protection Project and ICLEI's<sup>1</sup> Cities for Climate Protection Campaign in 2006, the Council adopted a resolution, committing to implement a five-step program:

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<sup>1</sup> ICLEI was founded in 1990 as the International Council for Local Environmental Initiatives as an international association of local governments and national and regional local government organizations that have made a commitment to sustainable development. In 2003, ICLEI's members voted to change the name to "ICLEI – Local Governments for Sustainability".

1. Conduct a local emissions inventory and forecast of greenhouse gas emissions.
2. Develop an emissions reduction target.
3. Prepare an action plan to achieve the target.
4. Implement the approved action plan.
5. Evaluate, monitor, and review progress in meeting the stated targets.

Many cities have followed this five-step program precisely by developing a reduction target first and then preparing an action plan. Hayward chose to prepare the action plan concurrent with the emissions reduction target so that more information regarding the costs and challenges associated with meeting the target would be available when the target is adopted.

On February 26, 2008, the Council authorized staff to enter into a contract with the Bay Area Air Quality Management District for the receipt of a grant of \$40,000 to be spent on the preparation of a Climate Action Plan (CAP). An additional \$40,000 of Measure 'D' funds were allocated to match the grant. The Council also authorized staff to issue a request for proposals and execute a contract with a consultant for the preparation of a CAP. Since that authorization, the City hired the team of HDR and Town Green to assist with the preparation of the CAP and to conduct public outreach efforts associated with it.

On July 24, 2008 and July 29, 2008, work sessions were held with the Planning Commission and the City Council, respectively, to collect ideas for ways to reduce the City's greenhouse gas emissions and to receive general direction regarding the preparation of the CAP. Staff has incorporated the suggestions made at those meetings as well as the input from the City Council Sustainability Committee and several public meetings into the attached draft CAP.

A memo from staff outlining the approach to identifying and adopting a GHG reduction target was presented to the Council in September 2008, and to the City Council Sustainability Committee in October 2008.

## **DISCUSSION**

### **Community Participation** –

#### *Community Meeting* –

Approximately 50 people attended a community meeting on Saturday, July 26, 2008, where staff introduced the scope and purpose of development of the CAP to the community, educated attendees about the importance of the Plan, summarized the emissions inventory, explained what efforts the City is making in terms of how it is reducing greenhouse gas (GHG) emissions, and began a dialogue with citizens and businesses. Ideas and suggestions received at the community meeting were used to help guide staff and the consultants in terms of the types of GHG reduction strategies that have been studied and included in the draft CAP.

Two guest speakers made presentations at the community meeting. Doug Grandt, a member of the Keep Hayward Clean and Green Task Force and a member of The Climate Project – a group of volunteers trained to give presentations based on Al Gore's *An Inconvenient Truth* - discussed the

importance of GHG emissions. The other speaker, Ann Hancock, is the Executive Director and Co-Founder of Sonoma County's Climate Protection Campaign. Ms. Hancock spoke about her experiences working with local governments and citizen groups in Sonoma County preparing Climate Action Plans and inspiring individual action to reduce emissions.

Citizens were divided up by areas of interest and facilitators worked with each group to brainstorm and develop strategies in their respective sectors of interest. These sectors included transportation, business and community, health, energy, waste, and buildings. Ideas from the break-out groups were presented at the end of the meeting in the Council Chambers. A summary of those ideas is attached as Exhibit A.

#### *Survey –*

The City also elicited community feedback through a survey, which is posted on the City of Hayward's website. Nine on-line surveys were completed and the results were compiled in a spreadsheet along with input from other sources.

#### *Advisory Group –*

The Mayor established an Advisory Group comprised of representatives from the following seven entities: the office of Assembly Member Mary Hayashi, the Chamber of Commerce, AC Transit, Hayward Unified School District, California State University East Bay – Hayward Campus, the Keep Hayward Clean and Green Task Force, and Stopwaste.org. Group members were interviewed for their professional expertise and to gather ideas for the preparation of the CAP.

#### *Working Group –*

A working group consisting of staff from various City departments was assembled. The first meeting was held in July to introduce the need for a CAP and to garner departmental support for our efforts by eliciting ideas and projects currently underway that may contribute to GHG emission reductions. A second meeting was held in September where the consultants presented a set of potential actions, which were derived from feedback received to date. The group was provided a feedback worksheet and encouraged to provide their thoughts and ideas on each action. The working group has also been invited to review and comment on preliminary drafts of the CAP.

#### *Outreach Meetings –*

During the months of October 2008 through January 2009, staff made presentations to the Citizens Advisory Committee to the Board of the Hayward Area Recreation and Park District (HARD), the Youth Commission, the Evangelical Churches of the Hayward Area (ECHA), the Keep Hayward Clean and Green Task Force, the Rotary Club, the South Hayward Neighborhood Collaborative, the Latino Business Roundtable, and the Chamber of Commerce's Leadership Hayward class. These meetings have been an opportunity for staff to inform the public about the preparation of the CAP and City efforts that are currently underway to reduce GHG emissions. Staff has also presented each group with a strategies and actions worksheet to collect additional comments that have been considered for incorporation in the draft CAP. In general, comments received have been positive

and people have recognized the need to conserve energy, drive less, and find ways to make renewable energy more affordable. Specifically, many people supported the idea of making solar photovoltaic systems more affordable and increasing the availability of public transportation. Most of the negative comments received were regarding the City's support of the Russell City Energy Center.

### **Greenhouse Gas Emissions Inventory –**

In 2006, ICLEI prepared the City's inventory of greenhouse gas emissions, which estimated all the emissions caused by transportation, energy use by buildings, and waste during 2005. The inventory was updated in June 2008, which was presented to the Council and Planning Commission in July 2008. The update incorporated vehicle miles traveled on state highways and freeways, more accurate data from PG&E, and an improved method of calculating emissions related to waste.

The inventory was updated again in December 2008 to further refine the methodology for estimating methane emissions associated with landfill waste and to convert all emissions to the metric unit of measurement. Using metric units will enable Hayward to more easily compare its emissions with those of other jurisdictions. The current total emissions estimated for 2005 is now 1,183,279 metric tons. The City's previous total was equivalent to 1,160,706 metric tons<sup>2</sup> or 1,279,438 short tons<sup>3</sup>. The emissions from waste are now estimated to be 52,319 metric tons (57,671 short tons). This is a 76% increase from the 32,820 short tons reflected in the June report. The increase in the emissions estimate was due to a change in the emissions factor per ton of landfilled waste. The same raw data from 2005 was used in the December 2008 update.

The methodology for estimating emissions is an evolving science and will continue to change periodically in the future. Over time, Hayward's baseline emissions for 2005 will change and become more accurate. As future inventories are conducted to monitor Hayward's progress, emissions will always be compared with 2005 levels to measure progress. Staff will ensure that consistent methodology is used when comparing the emissions associated with different time periods.

### **Adoption of Greenhouse Gas Reduction Targets –**

Adoption of the Climate Action Plan will include the adoption of a specific greenhouse gas reduction target. The targets proposed are:

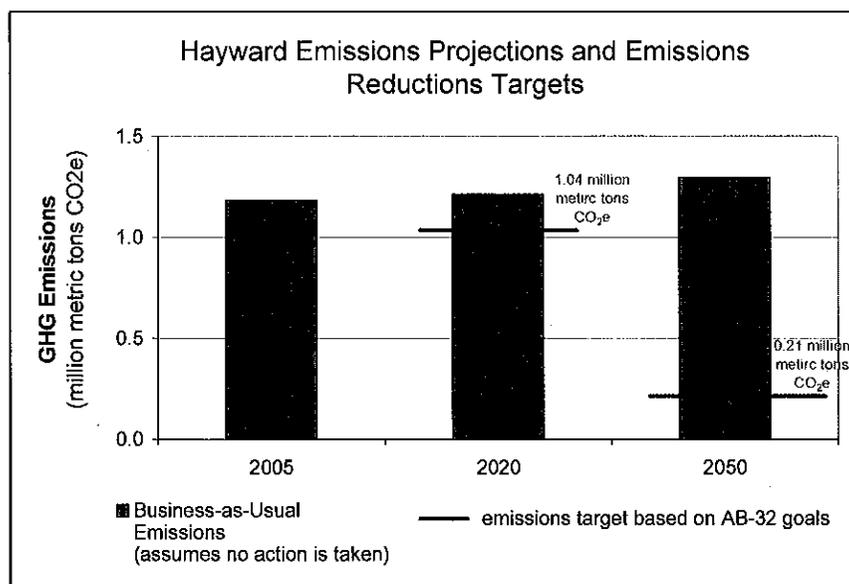
- 6 percent reduction of emissions below 2005 levels by 2013
- 12.5 percent reduction of emissions below 2005 levels by 2020
- 82.5 percent reduction of emissions below 2005 levels by 2050

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<sup>2</sup> A metric ton is equivalent to 1,000 kilograms.

<sup>3</sup> A short ton is equivalent to 2,000 pounds.

The following graph shows 2005 emissions and those projected for 2020 and 2050 along with the targets for 2020 and 2050.



The above goals are consistent with California’s Global Warming Solutions Act of 2006 (AB32), which requires emissions to be reduced to 1990 levels by 2020. The proposed target for 2050 is also consistent with Executive Order S-3-05, signed by the Governor in 2005, which established a greenhouse gas reduction target of 80 percent below 1990 levels by 2050. The proposed targets are different from the State’s due to the use of a different baseline year.

On April 8, 2005, the City of Hayward became a participant in the U.S. Mayors Climate Protection Agreement and committed to reducing greenhouse gas emissions by seven percent below 1990 levels by 2012. This is roughly equivalent to a reduction of 16 percent below 2005 levels by 2012. Emissions continued to grow between 1990 and 2005, therefore; the percent reduction necessary to reach the target increased. Given that the reduction was agreed to almost four years ago, it is more realistic to focus on meeting targets in line with the State’s deadlines.

In September 2008, the Council was presented with a memo from staff outlining the approach to identifying and adopting a reduction target. In October 2008, the memo was presented to the City Council Sustainability Committee where general support for the concept of following the State’s goals was provided to staff.

As noted in the draft CAP, if all the proposed actions are implemented, the City could see a reduction of 142,020 metric tons, or 12 percent below the 2005 baseline by 2020. However the proposed actions will not be enough for Hayward to meet the 2050 target. Implementation of the proposed actions would result in a 22 percent reduction in emissions relative to the 2005 baseline by 2050. Developing technologies, such as improved solar photovoltaic panels, more affordable solar water heating, lower emission vehicles, and significant behavioral changes regarding use of transit and energy will be necessary to achieve the long term goals identified in the CAP. It is expected that

these technologies will be identified as the CAP is updated approximately every 10 years or more frequently, depending on technologies identified and/or the success of implementing actions.

Other jurisdictions are following the same approach. For example, the City of Berkeley, while having adopted an 80 percent reduction target for 2050, focuses only on the actions needed to meet their 2020 target due to the uncertainties the future holds. It is more important to start implementing actions now than it is to identify up front all the actions the City will implement over a 40-year timeframe.

**Action Plan to Reduce Emissions –**

As indicated in the following table, the draft CAP contains 57 actions, which are organized into 9 strategies. Eighteen of the actions are directed at the City’s municipal operations and 39 are to reduce emissions in the community. A comparison of the current list of actions with the version presented to City Council Sustainability Committee in December 2008 is attached as Exhibit B.

	Strategy	Number of Actions		
		Community	Municipal	Total
1	Land Use and Transportation: Reduce Vehicle Miles Traveled	12	3	15
2	Transportation: Decrease the Carbon-Intensity of Vehicles	2	2	4
3	Energy: Improve Energy Performance of Existing Buildings	8	3	11
4	Energy: Improve Energy Performance of New Buildings	2	1	3
5	Energy: Utilize Renewable Energy	4	2	6
6	Waste: Increase Recycling and Food-Scrap Collection	7	3	10
7	Carbon Sequestration	1	1	2
8	Climate Change Adaptation <sup>4</sup>			
9	Community Outreach and Engagement	3	3	6
<b>Totals</b>		<b>39</b>	<b>18</b>	<b>57</b>

The proposed actions are divided into three general categories:

- Community-wide actions for which potential GHG emissions reductions have been estimated;
- Community-wide actions for which potential GHG emissions reductions have not been estimated; and
- Municipal actions.

<sup>4</sup> The three member agencies of the Hayward Area Shoreline Planning Agency (City of Hayward, Hayward Area Recreation and Park District and the East Bay Regional Park District) have pooled funds to contract with a consultant to prepare a Sea Level Rise Study. The study will evaluate the potential impacts of sea level rise on the Hayward shoreline and the feasibility of making improvements to prevent or mitigate potential flooding. The first draft of the study is expected to be available in April or May 2009. Staff expects to include a summary of the study in the final version of the CAP.

Potential GHG emissions reductions were estimated for most actions per the Methodology Report, attached to the CAP as Appendix D. Some actions are considered to support other actions and do not have specific GHG reductions assigned to them. All actions were carefully evaluated for potential GHG reductions, cost, ease of implementation, and time to full implementation to calculate priority rankings. As shown in Appendix K, the maximum score for each action is 100 points and the score from each category was weighted with the most emphasis being placed on potential emission reductions (40 percent). Cost accounts for 30 percent, ease of implementation – 20 percent, and time to full implementation – 10 percent. The timeline chart in Appendix L of the CAP (also attached as Exhibit C) lists the actions and shows when each action would be implemented.

### **Monitoring** –

The CAP recommends that the City assess the effectiveness of CAP programs on an annual basis. Annual reporting of specific programs and data that is relatively easy to obtain would be conducted to monitor the City's progress toward the targets. Annual reporting would be presented to the Council Sustainability Committee and is estimated to take approximately 25 hours of staff time each year. A full inventory of community-wide and municipal emissions would be conducted by City staff every three to five years to ensure programs are successfully reducing emissions, and in the target years (2013, 2020, and 2050) to ensure that goals were achieved. The full inventory would be similar to the baseline inventory that ICLEI prepared, and will give the City a clear indication whether or not it is meeting targets. It is estimated to take approximately 60 hours of staff time to conduct an inventory, however as the methodology for completing the inventory improves and data collection becomes more streamlined, the City may eventually be able to conduct inventories on an annual basis.

Many climate leadership groups, such as The Climate Registry and Sustainable Silicon Valley, require members to report emissions on an annual basis and they require annual dues of \$2,500 and \$1,000 respectively. There are benefits to joining these groups, including taking advantage of the technical support they offer and the clear message it would send to constituents that Hayward is taking climate change seriously. Also, The Climate Registry offers third party verification of inventories, which would be a requirement if local governments are subject to a cap and trade program in the future. However, at this time, staff recommends that the City continue to work only with ICLEI, where staff has developed a good working relationship. ICLEI does provide technical support for their inventory software and ICLEI's United States headquarters are located in Oakland.

### **FISCAL IMPACT**

The preparation of the CAP is being funded by a combination of a grant of \$40,000 from the Bay Area Air Quality Management District and \$40,000 in Measure D funds, which were authorized by the City Council on February 26, 2008. Measure D is a County initiative that assesses a per-ton disposal surcharge on all waste disposed in Alameda County. Fees are collected by disposal sites and transfer stations within Alameda County. No funding from the General Fund for the consultant is required, though approximately \$30,000 of staff time will be supported by the General Fund.

Implementation of the CAP is expected to present short-term costs and long-term savings associated with various GHG reduction strategies. Costs of implementing the 57 actions vary widely, but all will require staff time to administer them. Staff intends to provide cost estimates for implementing some of the programs when the final draft of the CAP is presented.

Implementation of the CAP programs to meet our aggressive targets requires appropriate staffing levels, which currently do not exist. Included in the draft CAP is a recommendation that the City create a new staff position to oversee implementation of the CAP. Responsibilities of the position, which could have the title of Sustainability Coordinator or Climate Action Coordinator, would include:

- designing and implementing programs, including revisions to the Zoning Ordinance and the General Plan, writing new ordinances, and updating the green building ordinance;
- community outreach;
- conducting future inventories of emissions and other measurements of the CAP's success;
- securing grants and loans for implementation of actions; and
- preparing updates to the CAP.

The annual cost of this position is estimated to be approximately \$105,000, including benefits. Depending on the energy savings associated with the municipal actions and the success of obtaining grant funding, it is possible for some or all of the staff costs to be offset. In April, staff plans to attend a webinar sponsored by ICLEI to learn about the possibility of creating a self-financing energy office for the City. In addition, the Bay Area Air Quality Management District may issue a new round of climate protection grants using funds from a ConocoPhillips settlement<sup>5</sup>. The new grants could total as much as \$7 million, while the previous round of grant funding totaled \$3 million. Assuming the grant program is approved, the City could apply for funding to help with the establishment of the new staff position as well as other costs associated with implementation of the CAP.

Also in the CAP is a recommendation for the formation of a Climate Action Management Team, which would include representatives from the Finance, Public Works, Development Services, City Manager (Economic Development), Maintenance Services, and Library and Neighborhood Services Departments. The Team would support the Coordinator with the implementation of specific programs. Assuming the Team consists of seven staff members, regular meetings of once per month and two hours per meeting (plus preparation time for meetings), total annual staff time for the Team could be approximately 420 hours. Based on the pay rate for a typical division head manager, the annual cost could be approximately \$10,000.

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<sup>5</sup> The Attorney General entered a Settlement Agreement dated September 10, 2007, with ConocoPhillips Company to resolve a dispute regarding the environmental impact of GHG emissions from the Clean Fuels Expansion Project at the refinery in Rodeo, California. The Settlement Agreement requires Conoco to make a payment by June 1, 2009, to a carbon offset fund created by the Bay Area Air Quality Management District (BAAQMD). The settlement agreement provides that the BAAQMD will use the payment "to fund grants for projects undertaken in the San Francisco Bay Area to achieve verifiable, quantifiable reductions in GHG emissions, with priority given to projects near the Rodeo refinery."

## **PUBLIC CONTACT**

Work sessions were conducted with the Planning Commission on July 24, 2008 and the City Council on July 29, 2008 and a community meeting was held on July 26, 2008. Notice of the community meeting was provided to an extensive list of entities including neighborhood organizations, the Chamber of Commerce, public transit providers, the school district, California State University East Bay – Hayward Campus, Chabot College, Alameda County, Hayward Area Recreation and Park District, and others. In addition, the CAP was discussed at regular City Council Sustainability Committee meetings on October 1, 2008 and December 3, 2008. Finally, as mentioned above, the preparation of the CAP was discussed at several community outreach meetings during the months of October 2008 through January 2009.

### **Information on the City's Website –**

An informative website is a crucial component to keeping the community informed and engaged in the preparation of the Plan. Staff has prepared a page for the City's website that has included:

- An introduction to the project;
- Background information (inventory report and information about state law and policy related to GHG emission reduction targets);
- Specific event notifications;
- Interactive questionnaire;
- Draft CAP;
- Carbon Footprint calculator; and
- Planning Commission, City Council and City Council Sustainability Committee reports.

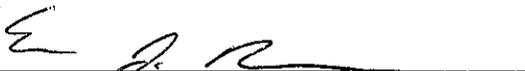
The website will eventually include the following:

- A web-log (blog) to receive comments on the draft CAP;
- Graphic indicators showing progress toward meeting GHG reduction goals by category;
- Final CAP with comment/question board;
- GHG emission reduction tips; and
- A possible on-line Climate Action Pledge.

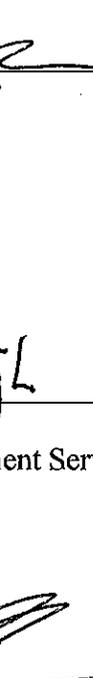
## **SCHEDULE**

A community meeting is scheduled for Thursday, March 19, 2009 in the City Council chambers. The meeting will be televised on KHRT and will be webcast. The deadline for public comments on the draft CAP is March 31, 2009. Presentation of the final CAP is anticipated for May to the Planning Commission and July to the City Council.

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Recommended by:

  
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Approved by:

  
Gregory T. Jones, City Manager

- Exhibits:
- A. Summary of Comments from July 26, 2008 Community Meeting
  - B. Actions List with Changes Tracked
  - C. CAP Program Implementation Schedule
  - D. Draft Climate Action Plan (distributed under separate cover)

3/3/2009

**City of Hayward**  
**Climate Action Plan Community Workshop**  
**July 26, 2008**

**Summary of Recommended Top Strategies for Reducing Emissions**

- 1. Transportation (Mary Lavelle)**
  - a. Get people to use mass transit more frequently (Ecopass, etc.)
  - b. Engage businesses in Hayward (encourage employees to use mass transit, fewer parking lots, etc.)
  - c. Address City parking policies for downtown to encourage less auto use
  - d. Creative zoning to discourage auto use (form-based codes, etc.)
  - e. Promoting students to walk to school
  
- 2. Building Construction and Energy Use (Cam Bauer)**
  - a. Hayward to be aggressive/bold in requiring green building measures (solar, solar water heaters, etc.)
  - b. High density near transit
  - c. City staff needs to be more knowledgeable about green building (eliminate permit fees for green building)
  - d. Carbon tax
  
- 3. Waste Reduction, Recycling and Composting (Debra Kaufman)**
  - a. Solid waste/recycling plays a more significant role than indicated in the inventory (recycling, waste diversion)
  - b. Educating about existing programs – maximize participation
  - c. Enhancing or establishing requirements to participate in recycling programs (cardboard, cans/bottles)
  - d. Green cleaning, etc.
  - e. Extending producer responsibility (packaging)
  - f. Reduction through recycling should be included in Climate Action Plan
  
- 4. Renewable Energy (Al Mendall)**
  - a. Requiring solar on all new buildings in Hayward
  - b. Municipal operations getting 100% energy from renewable sources by 2012
  - c. Solar on existing industrial buildings in SW Hayward
  - d. Berkeley-style solar financing
  - e. Education is important; State support is important; consider community-choice aggregation for renewable energy
  - f. Conduct wind energy feasibility studies to promote wind energy use

**5. Environmental/Public Health and General (Rob Simpson)**

- a. Don't need to reinvent carbon mitigation, but see how existing strategies from others to relate to Hayward
- b. Park and ride lot in Hayward
- c. Another BART station at K-Mart at Harder Road
- d. Berkeley-style solar financing (AB811)
- e. CCA energy system – help with financing (possibly expand Water Dept., etc.)
- f. Education and outreach – Clean and Green Task Force; working with private sector (Home Depot and reduced tree prices)
- g. Public health information sources and outreach (Zucchini festival)
- h. Reforestation (Caltrans' 238 corridor)

**6. Community and Business Engagement (Elisa Marquez)**

- a. Outreach – Green Portal – let others know and encourage them to get involved (HUSD, HARD, religions institutions, Chamber, etc.)
- b. Green Expo (vendors, PG&E) to educate and why/how to
- c. Encourage businesses to go green
- d. Financing – grants (Stopwaste.org, State Conservation Board – solar and wind)

**7. Institution/Education and General (Andy Wilson)**

- a. Cover all issues and prioritize with costs in mind – part of education
- b. Education is critical to get support of entire City
- c. How to educate? Internet, City website, newsletter
- d. CCA – community choice aggregate system for energy
- e. Quarry Village - develop land use designation for this type of development

DUE TO THE COLOR OF  
EXHIBITS B AND C,  
THEY HAVE BEEN ATTACHED  
AS SEPARATE LINKS