Measuring the environmental and social footprint of the Beijing Games

a unit of work for 16 to 19-year-olds

by Bob Digby

The Geographical Association

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Measuring the environmental and social footprint of the Beijing Games

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Introduction
This unit is about sustainability, humanitarian issues and the Olympic and Paralympic Games. The Sydney 2000 Games are often portrayed as a first—the first to plan most events on a single Olympic Park, and the first to claim the term ‘green games’ for the Olympic and Paralympic movement. True, the Games were unique in these respects. But Sydney’s was not a first for regeneration—it drew heavily on the experiences of those who planned the Barcelona 1992 Olympics and Paralympics in regenerating and re-branding an inner urban brownfield site. However, its focus on sustainability brought it to the world’s attention, such that subsequent bids by Athens, Beijing, and especially London, have developed interpretations of what sustainability means for their own Olympic bids.

In its bid for the 2012 Olympics and Paralympics, London used many of the team who successfully brought the Games to Sydney. The bid team promised to extend the themes of sustainability and Olympic legacy further. The Sydney 2000 Games are still regarded as a major achievement in the adoption of environmental criteria in planning for future games—London hopes to at least emulate it. Now, the International Olympic Committee (IOC) has adopted ‘sustainability’ in its mission statement, and has included it in the criteria by which future Olympic cities will be selected. An immediate question therefore is whether Beijing can work to similar principles in 2008.

Rationale for the unit
This unit aims to give students increased understanding of sustainability as well as some of the political and humanitarian issues presented by the Beijing Games. In this unit, students are asked to consider:

- the criteria for sustainable development and what is meant by ‘sustainable’ (Activity Resource Sheet F1: What is meant by sustainability?).
- the environmental issues presented by the Beijing Games that are of concern to the IOC,
- the social and ethical aspects of bidding for the Games.
- the criteria for sustainable development and what is meant by ‘sustainable’ (Activity Resource Sheet F1: What is meant by sustainability?).
- the environmental issues presented by the Beijing Games that are of concern to the IOC.
- the social and ethical aspects of bidding for the Games.

<table>
<thead>
<tr>
<th>Activity Resource Sheet No.</th>
<th>Title</th>
<th>Purpose—to:</th>
<th>Time allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>What is meant by sustainability?</td>
<td>Consider criteria by which sustainable development can be assessed</td>
<td>one-hour lesson</td>
</tr>
<tr>
<td>2</td>
<td>Identifying environmental problems in Beijing</td>
<td>Assess some of the environmental issues facing Beijing, its Olympics and Paralympics, and how these might be tackled—a foundation for Activity Resource Sheet F4</td>
<td>3 x one-hour lessons plus private study research</td>
</tr>
<tr>
<td>3</td>
<td>Can Beijing’s environmental problems be resolved?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>How sustainable are the Beijing Games?</td>
<td>Enable students to assess Beijing’s Olympics and Paralympics against criteria for sustainability</td>
<td>2 x one-hour lessons</td>
</tr>
<tr>
<td>5</td>
<td>How sustainable are the Beijing Games?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Humanitarian concerns and the Beijing Games</td>
<td>Confront some of the controversial issues about the Beijing Games set against human rights issues in China</td>
<td>1 hour lesson—or could be longer with full discussion</td>
</tr>
<tr>
<td>7</td>
<td>Supplementary resources</td>
<td>Provide students and teachers with useful websites</td>
<td></td>
</tr>
</tbody>
</table>
competitors and the public as a whole (Activity Resource Sheet F2: Identifying environmental problems in Beijing and F3: Can Beijing’s environmental problems be resolved?)

• the extent to which the Beijing Olympics and Paralympics can be considered sustainable (Activity Resource Sheet F4: How sustainable are the Beijing Games? and F5: Assessing sustainable development at the Beijing Games)

• the humanitarian issues presented by the Beijing Olympics and Paralympics and by China’s recent political history (Activity Resource Sheet F6: Humanitarian concerns and the Beijing Games).

In addition, there is a page of supplementary resources for further research into Beijing and the 2008 Games (Activity Resource Sheet F7).

You might also consider what your students know about China before beginning this work. Activity Resource Sheet E1 for the 14–16 age range (How green are the Beijing Games?) begins with ‘What do you know about China?’ You may wish to present this activity as an opener with your students—no matter what age they are! There is an accompanying PowerPoint file too with all the answers. If you decide to use it, allow about 10–15 minutes.

How long should each activity take?
The time allocation summarised on page 1 is recommended for each activity, though teachers should feel free to shorten or extend these as they wish.

How to organise the activities
Activity 1: What is meant by sustainability? (1 lesson)
If you decide to use Activity Resource Sheet E1 to establish what your class know about China, you should plan this first together with the PowerPoint file containing the answers. Allow about 10–15 minutes for this. Otherwise, start planning from the next stage onwards.

For the first lesson you will need enough rough paper for the class and copies of Activity Resource Sheet F1: What is meant by sustainability? Introduce the lesson as the first in a sequence of activities about the Olympic Games as follows (allow 10 to 15 minutes).

1. Ask the class to brainstorm the kinds of facilities and infrastructure that host cities such as Beijing, Sydney or London would have to build in order to host the Games.

2. Ask for feedback. Students should understand that there are huge costs associated with the development of new stadia and competition venues, athletes’ village, media centre and the like. They may also contribute issues such as affordability and this could lead to a class discussion about which countries get to host the Olympics and Paralympics.

3. As an extension to this activity/lesson, ask students to research the location of host cities for the summer games of the modern era, i.e. those held since 1896—which countries and continents are over- or under-represented?

4. Students could research and plot the location of cities that have submitted bids to host the Summer Games from, say, 1968 onwards. This information is readily accessible at <www.gamesbids.com/english/archives/past.shtml> with details for Olympic bids as far back as 1929 when Berlin won the right to host the 1936 summer games.

In the second stage of the lesson, explain that in the early 1990s Greenpeace joined forces with the New South Wales government to present the first, so-called ‘green games’.

1. Ask the class what they think this means. Ask for responses to judge how well they understand this.

2. Students form pairs and spend five minutes brainstorming what kinds of things might contribute to ‘green’ development. Examples include: What might it mean about the stadium? The village? The land on which Olympic and Paralympic facilities would be built?

3. Get feedback. Ask each pair to feed back what they have come up with. Build up/compile a collated list of criteria at the front of the class (allow about 20–25 minutes for this stage).

Now distribute copies of Activity Resource Sheet F1 and ask students to consider the 14 criteria for sustainable development. How well do these match up with the criteria that were devised by the class? Are there any criteria on the list that the class had not thought of? Or vice-versa?

Explain that the next few lessons are to be spent investigating how successful Beijing has been in meeting these criteria, and that you will be asking the class for their judgments on this at the end of this sequence of lessons (see Activity Resource Sheets F4 and F5 later).
Set a research task for students to find out about Beijing and its Olympics and Paralympics—for example:
- the city itself—what is it like? what is its geographical location like? what is its climate like?
- the Beijing Olympic and Paralympic Games—their location within the city, accessibility, Beijing Olympic Green and its facilities, what was there beforehand
- Beijing’s new international airport and other preparations the city has made for the 2008 Games
- Beijing’s achievements to date in bringing the Olympics and Paralympics to China.

**Activity 2: Tackling environmental issues in Beijing (3 lessons)**

This enquiry focuses on pollution in Beijing and how it might impact on the Games. High levels of air pollution and poor air quality in Beijing have concerned the IOC for some time. The Australian Olympic Committee has already decided that its athletes will not arrive in Beijing until just before the Games begin to avoid possible respiratory problems.

For these lessons you will need copies of Activity Resource Sheet F2: Identifying environmental problems in Beijing (Stage 1) and Activity Resource Sheet F3: Can Beijing’s environmental problems be resolved? (Stage 2).

**Stage 1/Lesson 1**

For this lesson you will need copies of Activity Resource Sheet F2: Identifying environmental problems in Beijing for each student. The focus for this lesson is on identifying the problems.

1. Introduce the activity and its purpose. Read through the introductory statements about pollution in China generally and Beijing specifically (5 minutes).
2. Organise the class into small groups of between two and four students each. Explain Activity 1 to them—that they should consider what impact the six problems might have on the Beijing Games (10 minutes).
3. Get feedback and ask each group to expand as far as possible on each problem. It can be laborious going through every statement in detail, but do allow time for discussion about as many statements as you think concentration will allow (about 10 minutes).
4. Now ask them to do Activity 2—selecting and justifying two problems from the list that they think will most impact on the Games. Ask them to present their choices to the class with reasons (about 15 minutes).
5. Set aside some time to discuss questions 3 and 4 on the activity resource sheet (15 minutes).
6. Finally, ask students to consider possible actions that could be taken to address these problems:
   - in the short-term, so that the Olympics and Paralympics can take place safely and
   - in the longer-term, so that pollution is reduced substantially over time.

Explain that you will be looking at some possible solutions in the next lesson.

7. Alternatively, ask students to do the research suggested for lesson 2 during private study time, when they can also devise their presentations.
8. Remind students to keep Activity Resource Sheet F2 safe for next lesson or collect them in!

**Stage 2/Lessons 2 (Research) and 3 (Presentation)**

For lessons 2 and 3 you will require copies of Activity Resource Sheet F3: Can Beijing’s environmental problems be resolved? Before the lesson, you may want to:
- book any computers necessary for the research task—you will need at least one computer for each pair of students to make this effective
- think about how you will divide up the seven statements and whether certain students might be suited to and/or interested in particular statements
- consider how the seven working groups will be allocated—divide the class up yourself, or allow students to select which groups they work in, whichever suits you
- if you are short of time, the research task for lesson 2 can be merged as a private study task at the end of lesson 1.

In the lesson, you need to:
1. Introduce the activity and its purpose. Read through the seven proposals to solve some of Beijing’s environmental problems. Organise students into groups and either allocate them to a task or allow them to choose. Explain the research task (5 minutes).
2. Encourage students to search YouTube and other news websites for good video clips. Emphasise that the material could be rather one-sided as some people publish videos promoting a particular viewpoint. Suggest that they use search phrases such as ‘Beijing pollution’, ‘Beijing air quality’ and/or ‘Beijing environmental problems’.
3. Students should work in groups. Explain Activity 2 to them—that they are looking for how such proposals might work, examples of places in the world where they have worked (e.g. London’s congestion charge) and evidence of how well they are working (allow about 30–40 minutes).

4. Ask students to prepare their research in the form of an oral report or PowerPoint presentation. Presentations are likely to take up to five minutes for each group, i.e. nearly 45 minutes in total with time allowances for discussion.

Encourage them to use quality broadsheet newspapers, such as:

- The Guardian <guardian.co.uk>, The Independent <independent.co.uk> and The Times <timesonline.co.uk> in the United Kingdom

Each of these sources regularly include news videoclips on their websites that are worth looking at.

Lesson 3 will be most successful if you:

- ask students to prepare a table summarising the strengths and weaknesses of each proposal
- debrief students at the end, e.g. which solutions seem most workable/least workable and why? How easy or difficult might it be to persuade the Chinese government to adopt these proposals? An important part of this enquiry is the discussion and feedback time where students can share ideas and evaluate solutions.

Activity 3: Assessing the sustainability of the Beijing Games (3 lessons)

School students sometimes find the concept of sustainability either vague, or difficult. The purpose of this activity is to help to make some of the abstract aspects of sustainability more concrete, and to broaden students’ awareness/understanding/comprehension of it. For these lessons you will need copies of Activity Resource Sheet F4: How sustainable are the Beijing Games?, Activity Resource Sheet F5: Assessing sustainable development at the Beijing Games plus copies of the sustainability criteria (Activity Resource Sheet F1). You will also find it useful to have Activity Resource Sheet F7: Supplementary Resources on the school network or otherwise readily accessible so that students can make use of the hyperlinks.

This lesson has three stages. Stage 1 will take one lesson and stages 2 and 3 will take the second. You can expand this activity to three lessons if your students are attracted by the idea of holding a full debate.

- **Stage 1**—students research the Beijing Olympics and Paralympics (1 lesson)
- **Stage 2**—using their research, students assess the sustainability of Beijing’s Olympics and Paralympics on the bi-polar scale provided (1 lesson)
- **Stage 3**—to conclude, students debate the motion: ‘This house believes that the Beijing Olympics and Paralympics have illustrated how sustainable development should be carried out in future’ (1 lesson).

Stage 1

Before this lesson:

- book any computers necessary for the research task—you will need at least one computer for each pair of students to make this effective
- think how you will divide up the 10 research items about Beijing’s Olympics and Paralympics and whether certain students might be suited to particular statements—I suggest five working groups focusing on two research items each
- consider how the five working groups will be allocated—divide the class up yourself or allow students to select which groups they work in, whichever suits you
- if you are short of time, the research activity can be given as a private study task at the end of the previous lesson.

During this lesson, you need to:

1. Introduce the activity and its purpose. Read through the 10 items for groups to research on Beijing’s Olympics and Paralympics. Organise students into groups and either allocate two items to each group, or allow them to choose. Explain the research task (allow 2–3 minutes).
2. Students should work in groups. Explain Activity B to them—that they are looking for evidence to inform other students about infrastructure and other Olympic Games developments in Beijing.
3. Video clips will be invaluable resources for this research, so encourage students to search YouTube, broadsheet newspaper websites (see details above), wikimedia, and the official Beijing Games website. Video material on YouTube includes excellent footage from the Discovery Channel, though somewhat one-sided in its view. Use search phrases such as ‘Beijing Olympics’ or ‘Beijing Olympic Green’, the name of Beijing’s main Olympic venue (allow about 20–25 minutes).

4. Ask students to prepare a brief presentation on their findings. 10 presentations is too many to listen to, so three to four bullet points, collated at the front of the class, will be plenty, together with any exceptional pictures or video clips (about 30 minutes).

5. At the end of the lesson, either collect in copies of the activity resource sheet (F4), or ask students to keep it safe for next lesson.

Stages 2 and 3

The purpose of this lesson is to analyse research findings by doing questions 3, 4 and 5 on Activity Resource Sheet F4. The lesson should be split roughly 20 minutes doing questions 3 and 4, 10 minutes on preparing for the debate, and 30 minutes on the debate (Question 5). You can expand this stage into two lessons if your students develop sufficient ideas and material.

Before the lesson, you will need to:
• identify who you want to propose and second for and against the motion in Question 5
• decide whether you want to warn students beforehand that you will do this, or whether you prefer them to try this ‘cold’—this will depend on you, your students and any experience that any have in debating.

Stage 2

1. Explain the purpose of the lesson—that you are going to use their findings from the previous lesson in trying to assess whether or not the Beijing Games are sustainable.

2. Distribute copies of Activity Resource Sheet F5: Assessing sustainable development at the Beijing Games and explain that students are going to use the results of their research from the previous lesson to prepare responses to questions 3 and 4 on Activity Resource Sheet F4. Allow about 10–12 minutes working in pairs to complete the table and add their final scores.

3. If you have time, remind students of the sustainability criteria on Activity Resource Sheet F1. Explain that you want them to prepare an assessment of how well they think Beijing has done using these broad criteria. Explain that it may not yet be possible to get answers for all criteria, but to judge as best they can based on the available evidence (10 minutes).

4. Allow time for feedback and debriefing the activity. Again, it can be laborious going through every criteria or statement, but allow time for brief discussion about the scores that students have arrived at, and how/why these may vary (10 minutes).

Stage 3

5. Now explain to students that next lesson they have 10 minutes to prepare for a debate on the motion given in question 5. Allocate about 10 minutes only for the proposers and seconders to prepare their statements. While they are doing this, the remaining students can prepare questions and points for discussion after the main speeches have been done (10 minutes).

6. Conduct the debate, allowing 3–4 minutes for each of the proposer and seconder on each side, i.e. about 15 minutes in total.

7. Then allow 10 minutes for discussion from the remaining students.

8. Finally, hold a vote about the motion. Allow some time to debrief the vote and why people voted as they did.

Activity 4: Humanitarian concerns and the Beijing Games (1 lesson)

Before beginning this activity/lesson, you will need:
• to have completed Activity Resource Sheet F5: Assessing sustainable development at the Beijing Games
• copies of Activity Resource Sheet F6: Humanitarian concerns and the Beijing Games.

How far do humanitarian issues impact on sport or the Olympics? The passage of the Olympic torch through Europe has already proved controversial, with street demonstrations in London, Paris and other cities. The Chinese have threatened ‘severe action’ if they encounter demonstrations when the torch reaches the most sensitive of areas, Tibet.

To help students get to grips with this, Activity Resource Sheet F6 encourages them to discuss some
Stage 1: Reading and researching
2. Ask students to read Figures 1–7, then allow them time to consider some of the questions beneath either in pairs or by themselves if you prefer to set this as a private study task before the lesson.
3. With prior preparation, you could ask them to come with some research from Amnesty International’s website, together with that from one of the Chinese sources, such as the People’s Daily. Tibet would make a very appropriate focus, given the demonstrations in Europe, the USA, Australia and elsewhere.

Stage 2: Discussion of the issues
1. Blu-tak 5 cards on to the classroom wall around different points of the classroom; the cards should read ‘Strongly agree’, ‘Generally agree’, ‘Not sure or No Opinion’, ‘Generally disagree’ and ‘Strongly Disagree’.

Stage 3: Conclusion/Wrapping up
To conclude the activity, ask each student to write about 500 words outlining why they do or do not believe that it was right to award Beijing the 2008 Olympics.

Statements
1. Because of China’s poor record of human rights, Beijing should not have been selected as Olympic host city.
2. China’s economic status means that it should automatically be a key Olympic host city.
3. Hosting the 2008 Games might encourage the Chinese government to become more tolerant and democratic.
4. No country has the right to tell another what to do.
5. The issue of Tibet is nothing to do with the 2008 Games.
6. Western nations should boycott the 2008 Games in Beijing.
7. Sport and human rights have nothing to do with each other.
Activity Resource Sheet F1: What is meant by ‘sustainability’?

Sustainability and the Olympics and the Paralympics
Sydney’s Olympics and Paralympics in 2000 were the first to be designed on environmental or ‘green’ principles. Sydney made its bid for the Games in the early 1990s based on a proposal for the world’s first ‘green games’. It began with a design competition for the Olympic Village, organised by architects, planners, housing associations and the local Council. One of five winning entries was from Greenpeace Australia, which based the whole Olympic development on ‘sustainable’ principles. Now, all Olympics and Paralympics have to be assessed against these same principles. How well will Beijing match up?

What should sustainable development be like?
‘Sustainable development’ can be defined as that which does not compromise quality of life for future generations by current practice. It means that any new development should be judged against criteria, such as public transport, affordable housing, quality of life features such as parks, and a mix of work and housing, which avoids long commutes. Unsustainable development includes environmentally destructive features such as traffic pollution, or which use volumes of energy. Figure 1 shows the criteria necessary for a sustainable, or ‘green’ development.

14 criteria for sustainable development
A development should:
1. Use or adapt existing facilities, rather than build from scratch.
2. Be financially viable.
3. Be environmentally friendly in its building and design.
4. Minimise adverse impacts on nearby residents.
5. Should protect and encourage native vegetation e.g. forests, wetland and fauna.
6. Be constructed on ‘brownfield sites’—i.e. those previously used as industrial and commercial sites—leaving ‘greenfield’ (or undeveloped land) untouched.
7. Include an effective public transport system, making all sites accessible.
8. Minimise waste, and encourage recycling.
9. Minimise energy use, e.g. use solar power and avoid high energy usage such as air conditioning.
10. Minimise water use, with storm water and sewage recycled for uses such as irrigation.
11. Be inclusive, i.e. benefit and include people from across all communities e.g. ethnic minorities, disabled groups.
12. Allow low-income groups to benefit as well as the wealthy.
13. Have affordable housing and rents within reach of everyone.
14. Minimise pollution; or where pollution exists, it should be cleaned up.
Activity Resource Sheet F2: Identifying environmental problems in Beijing

Environmental problems in China and Beijing

- China now has 16 of the top 20 dirtiest cities in the world and its filthy air causes thousands of premature deaths every year.
- At current levels, air pollution in Beijing is at least 2 to 3 times higher than levels considered safe by the World Health Organisation.
- The air quality in one city, Chongguin, was so bad in 2005 that it did not even reach the Chinese government’s own safety standard, which are much poorer than those of Australia, the EU or the UK, for 25 per cent of the time.
- In 2007, Beijing was said by the Chinese government to have clean air for more than 240 days during that year, using its own scale to decide what is and is not polluted. However, in most other countries that use an international scale, even Beijing’s cleanest days would still have registered as highly polluted.
- 70 per cent of China’s rivers and lakes are polluted.
- China overtook the USA as the largest emitter of CO2 in 2007.
- China has for the past few years opened a new coal-fired power station (the dirtiest means of producing electricity) every five days!
- 30 per cent of China suffers from acid rain caused by emissions from coal-fired power stations.
- One of the main reasons for the high levels of air pollution in Beijing is the traffic problem in the capital. Booming car sales have made air quality even worse.
- Beijing’s poor air quality has worried the International Olympic Committee, especially for endurance sports and distance running/walking and track events.
- 50 per cent of Beijing’s pollution comes from outside the city.
- Australia’s Olympic Committee decided in mid-2007 that its athletes will not arrive in Beijing until just before the Games begin to avoid possible respiratory problems.
- Beijing has poor quality tap water. Water is safe as it emerges from water treatment plants, but is contaminated by old and leaking pipes.

What environmental problems does China/Beijing face?

<table>
<thead>
<tr>
<th>Problem</th>
<th>How this might impact on the Games</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. China now has 16 of the top 20 dirtiest cities in the world</td>
<td></td>
</tr>
<tr>
<td>2. Air pollution in Beijing is two to three times higher than</td>
<td></td>
</tr>
<tr>
<td>levels considered safe by the World Health Organisation</td>
<td></td>
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<tr>
<td>3. 70 per cent of China’s rivers and lakes are polluted</td>
<td></td>
</tr>
<tr>
<td>4. 30 per cent of China suffers from acid rain caused by</td>
<td></td>
</tr>
<tr>
<td>emissions from coal-fired power stations</td>
<td></td>
</tr>
<tr>
<td>5. One of the main reasons for the high levels of air pollution in</td>
<td></td>
</tr>
<tr>
<td>Beijing is the traffic problem in the capital (can we say simply,</td>
<td></td>
</tr>
<tr>
<td>traffic congestion?)</td>
<td></td>
</tr>
<tr>
<td>6. Beijing’s tap water is unsafe, contaminated by old and leaking</td>
<td></td>
</tr>
<tr>
<td>pipes.</td>
<td></td>
</tr>
</tbody>
</table>

Stage 1: Identifying the problems (Lesson 1)

In small groups of two to four students:

1. Complete the table to show how the six environmental problems shown could affect the Beijing Games.
2. Select two problems from the table that you think will most affect the Games. Justify these, and present your reasons to the class.
3. When all groups have presented their choices, identify two choices that are considered most important by everyone.
4. Discuss and consider possible solutions to these two problems.
Activity Resource Sheet F3: Can Beijing's environmental problems be resolved? (Lessons 2 and 3)

The aim of this activity is to produce a group report to the Chinese authorities that will evaluate proposed solutions to some of Beijing’s environmental problems. To do this, study the table and do the following:
1. Divide up the seven proposals (1 to 7) between class members.
2. Each person or group should research how such a proposal might work and, where possible, how well it works in Beijing or in other places.
3. Feed back your findings to the class.
4. Complete the table and decide which solutions seem most workable, and why.

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Where it has been tried</th>
<th>Strengths and weaknesses of the proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enforcing changes to behaviour—traffic reduction measures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Congestion charge in city centres</td>
<td>London</td>
<td></td>
</tr>
<tr>
<td>2. Ban traffic on certain days</td>
<td>Athens</td>
<td></td>
</tr>
<tr>
<td>3. Move industry out of the city</td>
<td>Beijing</td>
<td></td>
</tr>
<tr>
<td>4. Reduce the number of registered vehicles by one million in the next year</td>
<td>Beijing</td>
<td></td>
</tr>
<tr>
<td>5. Enforce the movement of factories out of the city</td>
<td>Beijing</td>
<td></td>
</tr>
<tr>
<td><strong>Technological solutions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Using cleaner fuels for vehicles</td>
<td>Brazil—ethanol</td>
<td></td>
</tr>
<tr>
<td>7. Design cleaner cars</td>
<td>Toyota Prius</td>
<td></td>
</tr>
</tbody>
</table>
The Beijing Games | Measuring the Environmental and Social Footprint

Activity Resource Sheet F4: How sustainable are the Beijing Games?

It will help if you have first completed Activity Resource Sheet F2: Identifying environmental problems in Beijing.

What is meant by ‘sustainability’?
Sydney’s Olympic Games in 2000 were the first to be designed on environmental or ‘green’ principles—in planning, in building, and in discouraging private transport. Can Beijing match Sydney’s achievements?

‘Sustainable development’ can be defined as that which does not compromise quality of life for future generations by current practice. It means that any new development should be judged against criteria, such as public transport, affordable housing, quality of life features such as parks, and a mix of work and housing, which avoids long commutes. Unsustainable development includes environmentally destructive features such as traffic pollution, or which use large volumes of energy.

Use the chart on Activity Resource Sheet F5 to assess how sustainable the Beijing Games are. Some data may be difficult to get—e.g. whether the Games are financially viable—but it should give a picture of how sustainable these Games are.

Student tasks
2. As a class, research the internet to see what Beijing has done in terms of:
   - how far new facilities have had to be built
   - was the Olympic Park area a brownfield or greenfield development?
   - costs versus income—will the Beijing Games make a profit?
   - are there any environmentally friendly aspects of building design or materials used?
   - have local residents suffered in any way during the development phase?
   - has native vegetation been removed—or encouraged?
   - have the Chinese authorities encouraged environmentally-friendly features such as water re-use, energy-saving or renewable energy sources?
   - is anything being done about the huge amount of waste generated during the Games?
   - will local people be able to afford ticket prices?
   - will the Games generate pollution? Is public transport being encouraged?
3. Now, in pairs, complete the assessment chart on the following Activity Resource Sheet (F5). Score between +2 (very well) and -2 (very poor) according to how well you think Beijing has done in achieving sustainable development for its Games.
4. Now add up your total score. With 12 criteria, the maximum will be +24, and minimum -24. Feedback and compare your scores and reasons with others.
5. Finally, debate the motion: ‘This house believes that the Beijing Olympics have illustrated how sustainable development should be carried out in future’.

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### Activity Resource Sheet F5: Assessing sustainable development at the Beijing Games

<table>
<thead>
<tr>
<th>Positive</th>
<th>Very well +2</th>
<th>Fairly well +1</th>
<th>Average/ no opinion</th>
<th>Fairly poor -1</th>
<th>Very poor -2</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses or adapts existing facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Builds from scratch</td>
</tr>
<tr>
<td>Comments/reasons</td>
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<tr>
<td>Is financially viable</td>
<td></td>
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<td>Makes a large loss</td>
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<tr>
<td>Comments/reasons</td>
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<tr>
<td>Building/design is environmentally friendly</td>
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<td></td>
<td>Building/design is environmentally unfriendly</td>
</tr>
<tr>
<td>Comments/reasons</td>
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<tr>
<td>Poor impact on local residents</td>
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<td></td>
<td>Good impact on local residents</td>
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<tr>
<td>Comments/reasons</td>
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<tr>
<td>Plants protected/increased</td>
<td></td>
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<td></td>
<td></td>
<td>Vegetation is destroyed</td>
</tr>
<tr>
<td>Comments/reasons</td>
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<tr>
<td>Brownfield site</td>
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<td>Greenfield site</td>
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<tr>
<td>Comments/reasons</td>
<td></td>
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<tr>
<td>Effective public transport</td>
<td></td>
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<td></td>
<td></td>
<td>Poor public transport</td>
</tr>
<tr>
<td>Comments/reasons</td>
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<tr>
<td>Waste stream reduced, recycling common</td>
<td></td>
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<td></td>
<td>Significant waste stream and no recycling</td>
</tr>
<tr>
<td>Comments/reasons</td>
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<tr>
<td>Energy use minimised</td>
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<td></td>
<td></td>
<td>Energy use is wasteful</td>
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<tr>
<td>Comments/reasons</td>
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<tr>
<td>Water is recycled</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Water use is wasteful</td>
</tr>
<tr>
<td>Comments/reasons</td>
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<tr>
<td>Low income groups benefit as much as the wealthy</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Wealthy benefit more than low-income groups</td>
</tr>
<tr>
<td>Comments/reasons</td>
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<tr>
<td>Creates no pollution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Large amounts of pollution</td>
</tr>
<tr>
<td>Comments/reasons</td>
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</tbody>
</table>
Activity Resource Sheet F6: Humanitarian concerns and the Beijing Games

Several nations, pressure groups, and individuals are critical of the IOC’s decision to allow Beijing to host the Olympics and Paralympics. Some believe that the Chinese government’s history of humanitarian abuse and intolerance should be enough to ban China from holding the Olympics and Paralympics. Others believe that the Games could be a force for constructive change in China. Read Figures 1 to 7 and discuss the issues.

Figure 1
There is no mystery about the human rights record of China. It is abysmal. China’s human rights abuses should disqualify it from holding the Olympics. In 1993, 28 Chinese citizens submitted a petition to the IOC asking that Beijing be denied the Olympic Games until it released some political prisoners. It released some in the build-up to the 2000 Games bid, only to re-arrest them once they lost.
Source: Canada Tibet Committee, 2001

Figure 2
Olympic authorities must insist that no one seeking to attend the Games be denied entry to China, or find their activities restricted, even if their political views are opposed to the government. International media should have unrestricted access to all areas of Chinese life during the Olympics, including human rights and China’s criminal justice system. Olympic officials must insist on the right to monitor labour practices at Olympic construction sites, and oversee security measures.

Figure 3
The Beijing 2008 Olympics are a marketing bonanza, as multinationals from Nike to Coca-Cola queue to gain a foothold in China. The IOC has bought up all outdoor advertising space in the city. Nobody will be able to advertise in Beijing in the two-month period surrounding the games unless they go through the Olympic Committee. Beijing will double the A$1 billion sponsorship revenues generated by Sydney’s 2000 Olympics. Coca-Cola, Kodak and Swatch have signed up as sponsors for 2008. Nike has just opened a branded football stadium in Beijing. Marketing people will be rubbing their hands to take advantage of opportunities in China.
Source: Julia Day, The Guardian, 6 August 2001

Figure 4
In April 1989, pro-democracy protests spread quickly to other major cities in China, calling for political reform via peaceful demonstrations. This ended with the massacre in Beijing in Tiananmen Square on the night of 3-4 June when the army killed or injured hundreds of unarmed civilians. Thousands of arrests followed. People were imprisoned and sent to labour camps for exercising their right to freedom of expression. There has been no public enquiry into the events or compensation for families of those killed. In 2000, Amnesty International knew of 213 people still imprisoned for activities in the 1989 protests, a mere fraction of the real number of people who were unfairly tried and sentenced, and excluding prisoners who had completed sentences by June 2000.
Source: Amnesty International 2000
Figure 5
The death penalty continued to be used extensively to punish around 68 crimes, including economic and non-violent crimes. Based on public reports, we estimated that at least 1,010 people were executed and 2,790 sentenced to death during 2006, although the true figures were believed to be much higher.
Source: Amnesty International 2007

Figure 6
One man was sentenced to four years’ imprisonment in 2004 for his opposition to forced evictions in Beijing associated with construction for the Olympic games. He was tortured while in detention, reportedly suspended from the ceiling by the arms and beaten repeatedly by police in Dongcheng district detention centre, Beijing, and reportedly tortured in another prison.
Source: Amnesty International 2007

Figure 7
The president of the International Olympic Committee (IOC), Jacques Rogge, has expressed concern over recent unrest in Tibet. He said the IOC ‘called for a rapid, peaceful resolution of Tibet’. He condemned attempts to disrupt the Olympic torch relay (in Paris and London), saying violence ‘is not compatible with the values’ of the Olympic Games. A spokesman for the Beijing Olympic organising committee, said demonstrations in London were the work of ‘a few Tibetan separatists’. The official Chinese news agency Xinhua says attempts to sabotage the relay ‘will surely arouse the resentment of peace loving people’.
Source: BBC News website, 7 April 2008

Activity
1. Read Figures 1 to 7 above.
2. In pairs, discuss each figure in turn using the following guidance. Afterwards, you will have a whole class discussion about issues arising from these.
   - should Beijing have been selected as Olympic host city?
   - does China’s economic status mean that it should automatically be a key Olympic host city?
   - does hosting the Games put pressure on the Chinese government to become more democratic?
   - does one country have the right to tell another what to do in terms of human rights?
   - is the issue of Tibet anything to do with the Games?
   - should countries boycott the 2008 Games in Beijing if they don’t agree with what the Chinese government says or does?
   - are sport and human rights linked?
Activity Resource Sheet F7: Supplementary resources

General information on China
- Wikipedia
- Data on China can be found at www.worldbank.org or the CIA Factbook which is much more user-friendly.

The Beijing Olympics and Paralympics
- The official games website can be found at http://en.beijing-2008.org/
- The official IOC website for Beijing is at www.olympic.org/uk/games/beijing/index_uk.asp
- China’s own perspectives on the 2008 Games, and therefore written from a Chinese viewpoint, can be found at www.china.org.cn/english/index.htm
- Sportsworld, an events-hosting and ticketing organisation focussing on travel and tourism, has a good website for those intending to travel to Beijing http://beijing2008.sportsworld.co.uk/public/index.aspx
- There is some excellent footage from the Discovery Channel on YouTube—type ‘YouTube Beijing Olympics’ into Google. Be aware that it is somewhat one-sided in its view. But once into YouTube, look for ‘Beijing Olympics’ and there is a lot of excellent footage.
- YouTube also has great footage of other Beijing issues such as traffic congestion and pollution. Just type in ‘YouTube Beijing traffic’ or ‘pollution’ into Google.

News websites
The BBC website is excellent in several respects:
- for all sports stories www.bbc.co.uk/sport and use the search facility for Beijing Games
- BBC News for up-to-date stories www.bbc.co.uk/news
- BBC website has a special section titled China Today at http://news.bbc.co.uk/1/hi/in_depth/asia_pacific/2004/china/default.stm
- similar sports pages can be found from other international news organisations such as Sky or CNN.

General news stories regarding the Beijing Games can be found at:
  for China’s own government-vetted perspectives
- Guardian newspaper at www.guardian.co.uk
- Telegraph newspaper at www.telegraph.co.uk
- Sky News at www.news.sky.com

For issues regarding human rights in China and events such as the 1989 Tiananmen Square protests
- Amnesty International website at www.amnesty.org
  use the search option for material on China
- Human Rights Watch website http://hrw.org/doc/?t=asia&c=china
- ABC Four Corners website www.abc.net.au/4corners/archive and www.abc.net.au/4corners/content/2008/s2246032.htm for access to and details of excellent ABC Four Corners documentary titled ‘Voices of Dissent’ that screened on Monday 19 May 2008—includes video on demand and further resources
**Supplementary Activity: What do you know about China?**

This year, Beijing holds the Olympic Games. Of the 6.7 billion people in the world, it is estimated that more than four billion will watch the Games at some stage.

- How much will *they* know about China?
- How much do *you* know about China?
- Try answering the following! You can do it either solo as a quiz, as a paired exercise in intelligent guesswork, or use it as a basis to find out something about China.
- Whichever way, discuss your answers with other people and you’ll get to know China a little better. Those answers that you don’t know—find out!

**What is China’s full name?**

<table>
<thead>
<tr>
<th>Put these countries in order of size from largest to smallest</th>
<th>Canada</th>
<th>USA</th>
<th>Russia</th>
<th>China</th>
</tr>
</thead>
</table>

**Is China north or south of the equator?**

**Roughly, what is China’s population?**

**What is China’s capital city?**

**What is China’s largest city?**

<table>
<thead>
<tr>
<th>How many times larger is China than Australia? the UK?</th>
<th>1.25</th>
<th>2.5</th>
<th>25</th>
<th>32</th>
<th>38</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>How many ‘million cities’ are there in China (i.e. cities with over 1 million population)?</th>
<th>9</th>
<th>19</th>
<th>90</th>
<th>900</th>
<th>1900</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Which one of these is China’s GNI (or average income) per person in US$ per year? Which one is the UK’s? Which one is Australia’s?</th>
<th>200</th>
<th>2000</th>
<th>22470</th>
<th>33940</th>
<th>40560</th>
</tr>
</thead>
</table>

**What is China’s most commonly spoken language?**

**What is China’s currency?**

<table>
<thead>
<tr>
<th>Which one of these is China’s life expectation in years? Which is the UK’s? Which is Australia’s?</th>
<th>64 men 68 women</th>
<th>71 men 75 women</th>
<th>76 men 81 women</th>
<th>78 men 84 women</th>
</tr>
</thead>
</table>

**What is China’s main political party?**

<table>
<thead>
<tr>
<th>Which European city is at a similar latitude to Beijing?</th>
<th>London</th>
<th>Madrid</th>
<th>Berlin</th>
<th>Oslo</th>
<th>Athens</th>
</tr>
</thead>
</table>