

ANALYSIS OF ORIGINAL BILL

Franchise Tax Board

Author: Arambula Analyst: John Pavalasky Bill Number: AB 1527
Related Bills: See Legislative History Telephone: 845-4335 Introduced Date: February 23, 2007
Attorney: Douglas Powers Sponsor: _____

SUBJECT: California Cleantech Advantage Act Of 2008/Costs For Cleantech Property And Research Expenses Credits

SUMMARY

This bill would create two marketable tax credits relating to the clean technology (cleantech) industry.

PURPOSE OF THE BILL

According to the author's office, the purpose of the bill is to create targeted tax incentives to increase investment in California cleantech activities.

EFFECTIVE/OPERATIVE DATE

As a tax levy, this bill would be effective immediately and specifically operative for taxable years beginning on or after January 1, 2008, and before January 1, 2013.

POSITION

Pending.

SUMMARY OF SUGGESTED AMENDMENTS

Technical amendments are necessary and are provided. Department personnel are available to work with the author to resolve the implementation issues discussed in this analysis, as well as any other issues that arise as the bill moves through the legislative process.

Board Position:

_____ S _____ NA _____ NP
_____ SA _____ O _____ NAR
_____ N _____ OUA X PENDING

Department Director

Date

Lynette Iwafuchi
for Selvi Stanislaus

5/2/07

ANALYSIS

FEDERAL/STATE LAW

A. Tax Credits

Existing state and federal laws provide various tax credits designed to provide tax relief for taxpayers who incur certain expenses (e.g., child adoption) or to influence behavior, including business practices and decisions (e.g., research credits or economic development area hiring credits). These credits generally are designed to provide incentives for taxpayers to perform various actions or activities that they may not otherwise undertake.

1. Prior California Manufacturers' Investment Credit (MIC)

Previous California law allowed qualified taxpayers a Manufacturers' Investment Credit (MIC) equal to 6% of the qualified costs paid or incurred on or after January 1, 1994, and before January 1, 2004, for qualified property that was placed in service in California.

For purposes of the MIC, a qualified taxpayer was any taxpayer engaged in manufacturing activities described in specified codes listed in the Standard Industrial Classification (SIC) Manual, 1987 edition. Qualified property was any of the following:

- 1) Tangible personal property that is defined in Internal Revenue Code (IRC) section 1245(a) and used in a qualified SIC Code activity, that is used primarily for:
 - manufacturing, processing, refining, fabricating, or recycling of property;
 - research and development;
 - maintenance, repair, measurement, or testing of otherwise qualified property; or
 - pollution control that meets or exceeds state or local standards.
- 2) The value of any capitalized labor costs directly allocable to the construction or modification of the property listed in #1 above or for special purpose buildings and foundations listed in #3 below.
- 3) Special purpose buildings and foundations that are an integral part of specified activities.

For taxpayers engaged in computer programming and computer software-related activities, qualified property included computers and computer peripheral equipment used primarily for the development and manufacture of prepackaged software and the value of any capitalized labor costs directly allocable to such property.

The MIC explicitly excluded certain types of property from the definition of qualified property, such as furniture, inventory, and equipment used in an extraction process.

The MIC statute was repealed by its own terms and ceased to be operative as of January 1, 2004, due to the number of manufacturing sector jobs in California no longer meeting the MIC statutory requirements.

2. *Research Credit*

Qualified research credit

Existing federal and California law provides a tax credit for “qualified research” equal to 20% (15% California) of the amount by which a taxpayer’s qualified research expenses for a taxable year exceed its base amount for that year. Qualified research expenses eligible for the research tax credit consist of: (1) in-house expenses of the taxpayer for wages and supplies attributable to “qualified research,” (2) certain time-sharing costs for computer use in “qualified research,” and (3) 65% of amounts paid or incurred by the taxpayer to certain other persons for “qualified research” conducted on the taxpayer’s behalf (so-called contract research expenses).

Beginning in 2005, the federal Energy Tax Incentives Act (ETIA) of 2005 provides that 100% of amounts paid or incurred by the taxpayer to eligible small businesses, universities, and federal laboratories for qualified energy research would constitute “qualified research” expenses as contract research expenses, rather than 65% of “qualified research” expenditures allowed under present law. An eligible small business for this purpose is a business in which the taxpayer does not own a 50% or greater interest and the business has employed, on average, 500 or fewer employees in the two preceding calendar years. California does not conform to the increase to 100% of amounts paid or incurred by the taxpayer as contract research expenses.

University basic research credit

In addition, corporations are allowed a research tax credit for “basic research” in an amount equal to 20% (24% California) of the corporate cash expenses (including grants or contributions) paid for basic research conducted by universities (and certain nonprofit scientific research organizations) in excess of a base amount for that year.

Qualified energy research credit

Starting in 2005, the ETIA modified the research credit to allow a federal research credit equal to 20% of the taxpayer’s expenditures on qualified energy research undertaken by an energy research consortium to which California does not conform. The amount of federal credit claimed is determined only with regard to such expenditures by the taxpayer within the taxable year. Unlike the general rule for the research credit, the 20% federal credit for research by an energy research consortium applies to all such expenditures, not only those in excess of a base amount, however determined.

An energy research consortium is a qualified research consortium as under present law that is also organized and operated primarily to conduct energy research and development in the public interest and to which at least five unrelated persons paid or incurred amounts to such organization within the calendar year. In addition, to be a qualified energy research consortium, no single person shall pay or incur more than 50% of the total amounts received by the research consortium during the calendar year.

Alternative incremental research credit (AIRC) regime

Taxpayers are allowed to elect an AIRC regime. If a taxpayer elects to be subject to this alternative regime, the taxpayer is assigned a three-tiered fixed-base percentage (that is lower than the fixed-base percentage otherwise applicable under present law) and the federal credit rate likewise is reduced to 2.65%, 3.2%, and 3.75%. The AIRC rates are modified for California purposes to be 1.49%, 1.98% and 2.48%, respectively.

Beginning in 2006, the Tax Relief and Health Care Act (TRHCA) of 2006 increased the rates of the federal AIRC to 3% (rather than 2.65%), 4% (rather than 3.2%), and 5% (rather than 3.75%). California does not conform to these increased rates. The AIRC rates for California purposes continue to be 1.49%, 1.98% and 2.48%, respectively.

Alternative simplified credit

Starting in 2006, the TRHCA created, at the election of the taxpayer, an alternative simplified credit for “qualified research” expenses, to which California does not conform. The federal alternative simplified research is equal to 12% of qualified research expenses that exceed 50% of the average qualified research expenses for the three preceding taxable years. The rate is reduced to 6% if a taxpayer has no qualified research expenses in any one of the three preceding taxable years.

An election to use the federal alternative simplified credit applies to all succeeding taxable years, unless revoked with the consent of the Secretary. An election to use the federal alternative simplified credit may not be made for any taxable year for which an election to use the federal alternative incremental credit is in effect. A transition rule applies that permits a taxpayer to elect to use the federal alternative simplified credit in lieu of the alternative incremental credit if such election is made during the taxable year which includes January 1, 2007. The transition rule only applies to the taxable year that includes that date.

Additional California modifications

As under federal law, only corporations qualify for the “university basic research credit.” The terms “qualified research” and “basic research” include only research conducted in California. In computing gross receipts, only gross receipts from the sale of property held for sale in the ordinary course or business and delivered or shipped to a purchaser within California will be included. Qualified research expense is modified to exclude any amount paid or incurred for tangible personal property that is eligible for the exemption from sales or use tax under California law.

Under California law, “basic research” is modified to include any basic or applied research including scientific inquiry or original investigation for advancement of scientific or engineering knowledge or the improved effectiveness of commercial products, except the term does not include any of the following:

1. Basic research conducted outside California.
2. Basic research in social sciences, arts, or humanities.
3. Basic research for purposes of improving a commercial product if the improvements relate to style, taste, cosmetic, or seasonal design factors.
4. Any expenditure paid or incurred to ascertain existence, location, extent, or quality of any deposit of ore or other mineral, including oil or gas.

California law also provides special treatment for taxpayers engaged in biopharmaceutical research activities or other biotechnology research and development activities. For these taxpayers, payments to qualifying organizations that qualify for the credit include payments to research hospitals that are owned by institutions of higher education and certain charitable research hospitals designated as a “specialized laboratory cancer center” that has received Clinical Cancer Research Center status from the National Cancer Institute.

California does not conform to the changes made to the research credit by the ETIA and the TRHCA.

The California credit is permanent, and therefore the federal termination date of December 31, 2007, does not apply.

B. Sale of Credit Carryovers

When a taxpayer has a credit for the tax year that exceeds the tax for that tax year, the excess of the credit over the tax for the taxable year may be carried over and used to offset the tax in subsequent years and is referred to as a credit carryover.

Under federal law, Internal Revenue Code (IRC) section 383 was added to the Internal Revenue Code in 1954 to guard against “trafficking of credit carryovers.” That section has been amended numerous times since, each time to further tighten the rules preventing trafficking in these credit carryovers. When a corporation acquires another corporation with credit carryovers, IRC section 383 limits the amount of acquired credit carryovers the buyer may use to offset tax on its tax return each year. California conforms to IRC section 383 and the limitations in that section are made to apply to California credits. The purpose of this rule under federal and state law is to make credit carryovers a neutral factor in a corporate acquisition. Prior to the limitation, corporations with large credit carryovers were being purchased by corporations with large tax liabilities because the acquired corporation’s credit carryovers could be used to reduce the buyer’s tax.

Current federal and state laws lack provisions that allow a taxpayer to sell credit carryovers to another taxpayer. However, the California low-income housing credit contains a provision allowing a corporation to elect to assign any portion of its credit allowed for the taxable year to one or more affiliated corporations for that taxable year.

THIS BILL

This bill would allow the following new credits under the Personal Income Tax Law (PITL) and the Corporation Tax Law (CTL) and add a new rule allowing the sale or trade of unused “qualified tax credits” by a “qualified seller” to a “qualified buyer,” as follows:

1. This bill would provide an 8% credit to a “qualified taxpayer” for “qualified costs” on or after January 1, 2008, for “qualified cleantech property” that is placed in service in California. This “qualified cleantech property credit” also defines the following terms:
 - “Qualified taxpayer” means a small business, as defined under the Government Code, having gross income of less than \$10 million that is earned in California.
“Small business” under the Government Code means a business meeting either of the following definitions:
 1. An independently owned and operated business that:
 - Is not dominant in its field of operation.
 - The principal office of which is located in California.
 - The officers of which are domiciled in California.
 - Has 100 or fewer employees.
 - Meets an average annual gross receipts test over the previous three years.
 2. Is a manufacturer with 100 or fewer employees that meets both of the following tests:
 - Is primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
 - Is classified between Codes 2000 to 3999, inclusive, of the SIC Manual published by the United States Office of Management and Budget, 1987 edition.
 - “Qualified costs” mean the amount paid or incurred by a “qualified taxpayer” for acquiring and installing “qualified cleantech property” that is placed in service in California.
 - “Qualified cleantech property” means any “tangible personal property” that uses technology to compete favorably on price and performance while reducing pollution, waste, and use of natural resources and that focuses on the environmental impact of human activities. This definition states that “qualified cleantech property” includes tangible personal property that uses wind, solar, biomass, and hydrogen technologies that result in cleaner air and water, encourage the reuse of materials, and result in reductions of greenhouse gas emissions.

- “Tangible personal property” means tangible personal property, including machinery and equipment, fuel used in the manufacturing process, and operating structures purchased (leased property does not qualify) by the “qualified taxpayer” or certain specified contractors that is used primarily for:
 - manufacturing, processing, refining, fabricating, or recycling of property;
 - research and development;
 - maintenance, repair, measurement, or testing of otherwise qualified property;
 - pollution control that meets or exceeds state or local standards; or
 - special purpose buildings and foundations, including certain property constructed for the “qualified taxpayer,” and used as an integral part of the manufacturing, processing, refining, fabricating, or recycling process or as a research or storage facility for use in connection with the manufacturing process. Buildings used solely for warehousing purposes after completion of the manufacturing process specifically do not qualify as “tangible personal property.”

Certain types of property are explicitly excluded from the definition of “tangible personal property,” such as consumables with a normal useful life of less than one year (except for fuel used or consumed in the manufacturing process), furniture, inventory, and equipment used in the extraction process or equipment used to store finished products that have completed the manufacturing process.

- Additional definitions are provided for the terms “fabricating,” “manufacturing,” “processing,” and “refining.”

If the credit allowed exceeds the tax for the taxable year, the excess may be carried over to reduce the tax in subsequent years for a maximum of nine years or until exhausted, whichever comes first.

The bill disallows the credit, any further credit, and any credit carryover to a “qualified taxpayer” that has previously been allowed a credit with respect to the “qualified cleantech property” when that “qualified cleantech property” is disposed of or removed from California within one year of the date of purchase. The disallowance begins in the year in which the “qualified cleantech property” is disposed of or removed from California.

This “qualified cleantech property credit” contains a sunset date of January 1, 2013.

2. This bill would, in modified conformity to federal law, provide a 20% credit for research conducted in California that is dedicated to the development of cleantech technologies. This “qualified cleantech research credit” would be in addition to the current California research credit.

Under the PITL and CTL, the bill provides a tax credit equal to 20% of the amount by which a taxpayer’s qualified research expenses for a taxable year exceed its base amount for that year. Qualified research expenses eligible for the research tax credit consist of: (1) in-house expenses of the taxpayer for wages and supplies attributable to “qualified research,” (2) certain time-sharing costs for computer use in “qualified research,” and (3) 65% of amounts paid or incurred by the taxpayer to certain other persons for “qualified research” conducted on the taxpayer’s behalf (so-called contract research expenses).

As under federal law, taxpayers are allowed to elect an AIRC regime. If a taxpayer elects to be subject to this alternative regime, the taxpayer is assigned a three-tiered fixed-base percentage (that is lower than the fixed-base percentage otherwise applicable under present law) and the credit rate likewise is reduced to 2.65%, 3.2%, and 3.75%.

Additionally, under the bill, corporations would be allowed a research tax credit for "basic research" in an amount equal to 20% of the corporate cash expenses (including grants or contributions) paid for basic research conducted by universities (and certain nonprofit scientific research organizations) in excess of a base amount for that year.

"Qualified research" is defined as research that is dedicated to the development of cleantech technologies, including those that use technology to compete favorably on price and performance while reducing pollution, waste, and use of natural resources and that focuses on the environmental impact of human activities. This definition states that "qualified research" includes research into cleantech technology that uses wind, solar, biomass, and hydrogen technologies that result in cleaner air and water, encourage the reuse of materials, and result in reductions of greenhouse gas emissions.

The bill requires research expense deductions otherwise allowed to be reduced by the amount of the credit.

If the credit allowed exceeds the tax for the taxable year, the excess may be carried over to reduce the tax in subsequent years for a maximum of nine years or until exhausted, whichever comes first.

This "qualified cleantech research credit" contains a sunset date of January 1, 2013.

3. In addition to the "qualified cleantech property credit" and the "qualified cleantech research credit," this bill would add a new rule that would allow a "qualified seller" to sell or trade up to 50% of any unused "qualified tax credit" to a "qualified buyer" to be used by the "qualified buyer," and defines the following terms:
 - "Qualified seller" means a taxpayer that was allowed the "qualified cleantech property credit" or the "qualified cleantech research credit."
 - "Qualified buyer" means any company that employs workers in California.
 - "Qualified tax credit" means the "qualified cleantech property credit" or the "qualified cleantech research credit."

Unused tax credits may be sold or traded by a "qualified seller" during any taxable year beginning on or after January 1, 2008, but may be used by a "qualified buyer" only for taxable years beginning on or after January 1, 2009.

The qualified seller and qualified buyer would be required to apply to the Franchise Tax Board for the purchase and sale or trade of any unused "qualified tax credit."

IMPLEMENTATION CONSIDERATIONS

The department has identified the following implementation concerns. Department staff is available to work with the author's office to resolve these and other concerns that may be identified.

1. Two credits for the same expense. As written, the "qualified cleantech research credit" would be in addition to the current California research credit. Therefore, the same research expense could be used to compute both the current California research credit and the new "qualified cleantech research credit." If this is not the author's intent, amendments to require the taxpayer to elect which credit would apply need to be made.

2. Undefined and unclear terms.

- "Qualified cleantech property credit." For purposes of the "qualified cleantech property credit," the bill defines the term "qualified cleantech property" to mean "any tangible personal property that uses technology to compete favorably on price and performance while reducing pollution, waste, and use of natural resources and that focuses on the environmental impact of human activities." However, the meaning of this phrase is unclear and undefined.

The definition of "qualified cleantech property" also states that "qualified cleantech property" includes "tangible personal property that uses wind, solar, biomass, and hydrogen technologies that result in cleaner air and water, encourage the reuse of materials, and result in reductions of greenhouse gas emissions," but does not define standards or minimum amounts of the required results. The lack of these requirements could allow the claiming of credits for only minimal improvements in required results.

Additionally, the meaning of the term "tangible personal property" is unclear because it is defined in more than one place in the section and the term is used within its own definition. The definition in the bill is more like a sales tax definition rather than an income tax definition, as was used for the MIC. For income tax purposes, "tangible personal property" is defined in IRC section 1245(a) and would be a more clear definition for the department to administer.

- "Qualified cleantech research credit." For purposes of the "qualified cleantech research credit," the bill defines the term "qualified research" to mean "research that is dedicated to the development of "cleantech technologies" and includes "those that use technology to compete favorably on price and performance while reducing pollution, waste, and use of natural resources and that focuses on the environmental impact of human activities." However, the meaning of this phrase is unclear and undefined.

The definition of "qualified research" also states that "qualified research" includes "research into cleantech technology that uses wind, solar, biomass, and hydrogen technologies that result in cleaner air and water, encourage the reuse of materials, and result in reductions of greenhouse gas emissions," but does not define standards or minimum amounts of the required results. The lack of these requirements could allow the claiming of credits for only minimal improvements in required results.

Without definition and clarification of these terms, and in particular because the department lacks the necessary expertise and clear legal authority (via a legislative rulemaking delegation) to supply an enforceable definition for these terms, it cannot be determined whether particular tangible personal property qualifies as “qualified cleantech property” or whether particular research qualifies for the “qualified cleantech research credit.” Undefined terms can lead to disputes between taxpayers and the department. Typically, credits involving an area where the department lacks expertise are certified by another agency or agencies that possess the relevant expertise. The certification language would specify the responsibilities of both the certifying agency and the taxpayer.

3. Incomplete conformity to current federal law. This bill does not conform to the changes made in the federal research credit in 2005 by the ETIA (creating a new “qualified energy research credit” and increasing to 100% from 65% certain expenses allowed as contract research expenses) or in 2006 by the TRHCA (creating a new “alternative simplified credit” for “qualified research” expenses and increasing the rates of the federal AIRC to 3% (rather than 2.65%), 4% (rather than 3.2%), and 5% (rather than 3.75%)) because those changes were made after California’s “specified date” of conformity (i.e. January 1, 2005). If the author intends to conform to the federal changes made in the federal research credit in 2005 and 2006, additional amendments would be necessary.
4. Sale or trade of unused “qualified tax credits.” The bill would require the seller and buyer to apply to the department for the purchase and sale or trade of unused “qualified tax credits.” Implementation issues with this requirement include the following:
 - The bill does not specifically provide that the department has the authority to approve or deny the purchase and sale or trade.
 - The bill lacks a grant to the department of authority to create rules or specify what criteria the department is to use in approving or denying a sale or trade. This may result in disputes between the department, taxpayers, the Board of Equalization, and the courts. The author may also want to consider an appeals process if an application is denied. In addition, although the bill allows for the sale or trade of unused “qualified tax credits” beginning on January 1, 2008, there are currently no procedures for processing and approving the purchases, and the department could not approve sales immediately. The author may want to consider a delayed implementation date.
 - The bill would require the qualified buyer to employ “workers” in California; however, the bill is silent about whether this test must be met on the sale date, on an ongoing basis as the credits are applied, or something else, or whether the “workers” must be retained after the purchase or are simply measured on the purchase date. In addition, the term “workers” is undefined and it could be argued that it would include independent contractors. Clarification of this issue, as well as a definition of “workers” qualifying under this bill, would prevent disputes between taxpayers and the department.
 - It is unclear how this provision would apply to unitary groups. Normally, credits belong to the separate entities within the group. When defining a “qualified seller” and “qualified buyer,” the bill uses the term “taxpayer” and does not provide a rule for affiliated taxpayers and unitary groups when buying or selling the credit. This could allow a unitary group (or any single member of that group) to purchase a credit if any single member of that group is a “qualified buyer” that employs “workers” in California.

- The bill specifies that for sales or trades of credits by sellers in the 2008 taxable year, the buyer cannot begin using the credit until taxable year 2009. As the bill is currently written, it could be argued that this requirement of a one year delay in the use of the credit by the buyer only applies to credits sold in the 2008 taxable year and that sales taking place in the 2009 and subsequent taxable years could be used by the buyer in the same taxable year in which the sale took place. The bill should clarify that the rule for the one year delay in the use of the credit by the buyer applies to all sales.
- The bill is silent on how the credit disallowance provision would coordinate with the sale or trade of the credit. For example, if the seller disposes of the property after it sells the unused credit, would the buyer of the credit be entitled to use the credit even though the credit to the seller has been disallowed? Clarification of this issue is needed to prevent disputes between taxpayers and the department.
- The bill does not specify whether the sale or trade of the credit would impact the carry forward period. Without clarification, the department would assume that the remaining credit carryover period for the seller would apply to the purchaser. If this is not the intent, it is possible that a buyer could purchase credit with only three years remaining in its carryover period and possibly either get an extended new period, or be stuck with the three-year period remaining if the seller were to use the credit itself. Clarification of this issue would prevent disputes between taxpayers and the department.
- The bill is silent on the tax consequence of the sale or trade of the credit to the seller or buyer. Thus, the amount received by the seller on the sale or trade of the credit would normally be included in the seller's gross income under general income tax rules. In the case where appreciated property is received by the seller in a trade, the seller would include in income the fair market value (FMV) of the property received in trade for the credit while the buyer may also be required to include in income the difference between its cost of the traded property and the FMV of that property. The bill does not specify how to determine the basis (value) that the credit will have for the buyer. If the author intends that the buyer is to receive a basis in the purchased or traded credit, then it may properly be required to amortize or otherwise recover that basis as the credit is used, and because the credit will more than likely be purchased at some discount to its face amount, the buyer may also be properly required to recognize as income the discount amount over some time period. Disputes may arise between taxpayers and the department as to the proper tax treatment of any consideration paid in connection with the sale of a credit under this bill. Further, the buyer could claim a deduction for the purchase price of the credit, providing a double tax benefit.
- It is unclear whether the credit may be sold or traded only once or whether the buyer would be allowed to sell or trade it in a subsequent sale to another buyer. Clarification of this issue would prevent disputes between taxpayers and the department.
- It is unclear what would happen if a taxpayer sells or trades a credit, and the credit is partially or completely disallowed in a subsequent audit by the department. The author may want to consider clarifying whether the seller, purchaser, or both would be liable for any assessments resulting from adjustments to the credit.

Moreover, because the department's audit of the seller's return may occur after normal expiration of the statute of limitations (i.e., under a waiver), it may be necessary for the department to request a waiver of the buyer's statute of limitations to allow the department to adjust the buyer's tax liability if the department determines that part or all of the claimed credit should be disallowed. Alternatively, if the claimed tax credit of the seller is disallowed only in part, it is unclear how this disallowance would be allocated between the seller and the buyer, especially if the statute of limitations has expired for one, but not both, of the affected taxpayers.

TECHNICAL CONSIDERATIONS

1. The bill would allow credits for taxable years beginning on or after January 1, 2008, and before January 1, 2013. Therefore, the last fiscal year that a credit would be allowed would be for the period beginning December 1, 2012, and ending on November 30, 2013. However, the repeal date in the bill is January 1, 2013, eleven months before the end of the last taxable year the credits are allowed. The attached amendments resolve this issue by changing the repeal date to December 1, 2013.
2. In two instances, the term "buyer" is used when "seller" is the correct term. The attached amendments resolve this issue by substituting the term "seller" for the term "buyer" in two places.
3. In two instances, the term "board" is used when referring to the Franchise Tax Board. The term "board" under the Revenue and Taxation Code normally is used to refer to the State Board of Equalization. The attached amendments resolve this issue by substituting the term "Franchise Tax Board" for the term "board" in two places.

LEGISLATIVE HISTORY

SB 359 (Runner, 2007/2008) would, among other things, increase the qualified research expense credit from 15% to 16% and conform to the federal AIRC rates. SB 359 is currently in the Senate Revenue and Taxation Committee.

SB 928 (Harman, 2007/2008) would, starting in 2007, raise the credit for increasing qualified research expenses from 15% to 20% and also fully conform to the federal AIRC rates. SB 928 is currently in the Senate Revenue and Taxation Committee.

AB 751 (Lieu, 2007/2008) would, starting in 2007, raise the credit for increasing qualified research expenses from 15% to 20% and also fully conform to the federal AIRC rates. AB 751 is in the Assembly Revenue and Taxation Committee.

AB 1285 (Parra, 2007/2008) would, starting in 2008, raise the credit for increasing qualified research expenses from 15% to 20% and also fully conform to the federal AIRC rates. AB 1285 is in the Assembly Revenue and Taxation Committee.

AB 2032 (Lieu, 2005/2006) would have increased the amount of the qualified research expense credit from 15% to 18%. AB 2032 failed to pass out of the Assembly Revenue & Taxation Committee.

AB 2567 (Arambula, 2005/2006) would have conformed the amount of the qualified research expense credit to the amount allowed at the federal level. AB 2567 failed to pass out of the Assembly Revenue and Taxation Committee.

AB 483 (Harman, 2001/2002) and SB 1165 (Brulte, 2001/2002) would have increased the credit for qualified research expenses from 15% to 20%. AB 483 was held in the Senate Revenue and Taxation Committee. SB 1165 failed to pass out of the originating house by the constitutional deadline.

AB 511 (Stats. 2000, Ch. 107) increased the state credit for qualified research expense from 12% to 15%.

PROGRAM BACKGROUND

The department annually releases a report on state tax expenditures. The 2006 State Tax Expenditure Report contains information regarding the usage of the Research Expense Credit, a copy is attached as Appendix A.

OTHER STATES' INFORMATION

The states surveyed include *Florida, Illinois, Massachusetts, Michigan, Minnesota, and New York*. These states were selected due to their similarities to California's economy, business entity types, and tax laws.

Florida allows corporate taxpayers to claim a corporate income tax credit for tax years beginning on or after January 1, 2007, for certain "eligible costs" for renewable energy technologies investment. *Florida* lacks a comparable credit for personal income taxpayers because *Florida* has no state personal income tax.

Illinois corporate and individual taxpayers may claim an income tax credit for qualified expenditures that are used for increasing research activities in *Illinois*. The credit equals 6½% of the qualifying expenditures.

Massachusetts allows corporate taxpayers to claim an income tax credit for qualified expenditures that are used for increasing research activities in *Massachusetts*. The credit is 15% of the basic research payments and 10% of qualified research expenses conducted in *Massachusetts*.

Minnesota allows corporate taxpayers a credit equal to 5% for qualified research expenses up to \$2 million. The amount of the credit is reduced to 2.5% for expenses exceeding the first \$2 million.

Michigan allows corporate taxpayers a credit for pharmaceutical research and for a percentage of the compensation for services paid by the taxpayer that is engaged in research and development of a hybrid system for propelling motor vehicles. An eligible taxpayer may claim a credit against the Single Business Tax equal to 6.5% of the excess of qualified research expenses paid in the tax year that relate to pharmaceutical-based business activity in *Michigan* paid during the three immediately preceding tax years.

Beginning in 2005, *New York* allows a credit for qualified emerging technology companies. The credit is equal to 18% of the cost of research and development property, 9% of the qualified research expenses, or the costs of high-technology training expenditures paid by the taxpayer. The credit is limited to \$250,000 per taxable year.

FISCAL IMPACT

The department's costs to administer this bill cannot be determined until implementation concerns have been resolved, but are anticipated to be significant.

This bill would require a new form or worksheet to be developed for the calculation of the credits, as well as additional audit resources to determine the amount of the unused credits eligible for sale or trade, depending upon the level of audit and approval activity prior to the approval of the sale or trade. As a result, this bill would impact the department's audit, printing, processing, and storage costs for tax returns. The additional costs have not been determined at this time. If the bill continues to move through the legislative process, costs will be identified and an appropriation will be requested.

ECONOMIC IMPACT

Revenue Estimate

The revenue impact of this bill is estimated to be as shown in the following table:

Estimated Revenue Impact of AB 1527 Effective for Tax Years Beginning On or After 1/1/2008 Enacted by 6/30/2007 (\$ in Millions)				
	2007-08	2008-09	2009-10	2010-11
Cleantech Property Credit	-\$5	-\$50	-\$115	-\$170
Cleantech Research Credit	-\$15	-\$140	-\$355	-\$530
Total	-\$20	-\$190	-\$470	-\$700

This analysis does not consider the possible changes in employment, personal income, or gross state product that could result from this bill.

Revenue Discussion

The revenue impact for this bill was estimated separately for the cleantech property credit and the cleantech research credit.

1. Cleantech Property Credit

The revenue impact of the cleantech property credit is the product of qualified cleantech property cost (QGPC) and the credit rate of 8%. Due to the lack of a specific definition of QGPC, many types of investments would qualify for the credit. For instance, in addition to investments in solar, wind, biomass, and hydrogen technologies, other types such as investment in more efficient equipment, pollution control devices, more efficient lighting, etc. could qualify.

Based on the 2004 Franchise Tax Board sample of corporate tax returns, we estimated that small businesses invested about \$15 billion in new equipment and property in California in the 2004 tax year. This is extrapolated to \$20 billion in 2008. To determine what fraction of this investment might qualify for the cleantech property credit, we relied on the 2006 Survey of Current Business, which provides detailed U.S. nonresidential investments in structures and equipment. For investments in structures, we assumed that 25% of the investment by the manufacturing, power and communication, petroleum and natural gas, and transportation industries would qualify as cleantech property. For investments in equipment, we assumed 25% of investment in computers, software, communication, industrial, and transportation equipment would qualify as cleantech property. These high percentages were assumed to include investments that are directly and indirectly related to cleantech technology in all industries and equipment types, including the ones mentioned above. Using these assumptions, it was derived that 16% of all U.S. investments in structures and equipment would qualify as cleantech property. Applying this percentage to the \$20 billion of investment by California small businesses, we estimated that QGPC for the 2008 tax year is \$3.2 billion ($\$20 \text{ billion} \times 16\% = \3.2 billion). This QGPC amount generates about \$256 million in cleantech property credit ($\$3.2 \text{ billion} \times 8\% = \256 million). Not all of the credit generated in a particular year would be used in that year. Taxpayers without sufficient tax liability would be unable to fully use the credit. It was estimated that taxpayers could use only \$30 million of the above-generated credit to reduce their tax liabilities for the 2008 tax year. The unused credit can be carried over and up to 50% may be sold or traded in future tax years.

2. Cleantech Research Credit

The revenue impact of the cleantech research credit is the product of qualified incremental research cost (QIRC) and the research credit rates. QIRC was assumed to be equal to 16% of all incremental research costs that qualify for the current California research credit. Based on this percentage, and data from the 2004 FTB corporate credit survey, all businesses were estimated to generate about \$600 million in cleantech research credits for the 2008 tax year. Not all of the credit generated in a particular year would be used in that year. It was estimated that taxpayers could use only \$70 million of the above-generated credit to reduce their tax liabilities for the same tax year. The unused credit can be carried over and up to 50% may be sold or traded in future tax years.

The above estimates were extrapolated to subsequent tax years by the projected growth in corporate profits as forecasted by the Department of Finance. The tax year estimates were then converted to fiscal year estimates shown in the table. For example, the total 2008-09 cash flow estimate of a revenue loss of \$190 million includes a \$40 million loss for 2008, plus \$150 million loss for 2009 due to higher credit use and reduced estimated tax payments. The sharp increase in the revenue impact was due to the accumulated stock of unused cleantech property and research credits, and the higher credit usage rates in later years as up to 50% of unused credit is allowed to be sold or traded.

ARGUMENTS/POLICY CONCERNS

IRC section 383, to which California conforms, has stringent requirements regarding the utilization of credit carryovers following any "ownership change" of greater than 5%. These federal rules have evolved over the past 35 years in response to perceived trafficking in credit carryovers by corporations that have acquired corporations for the primary purpose of utilizing the locked credit carryover tax benefits inherent in such corporations. In contrast to that long-standing federal policy, to which California has long conformed, the bill would specifically permit such selling or trading of credit carryovers.

LEGISLATIVE STAFF CONTACT

John Pavalasky
Franchise Tax Board
(916) 845-4335
john.pavalasky@ftb.ca.gov

Brian Putler
Franchise Tax Board
(916) 845-6333
brian.putler@ftb.ca.gov

Appendix A

The California R&D credit is a credit that normally is taken in conjunction with the Federal Research Credit. The calculation of the amount of research expenses creditable in California generally conforms to the calculation for federal purposes, with the exception that the California credit only applies to research activities conducted in California.

At the federal level, there are two reasons to encourage R&D. The first is that, without extra incentives, industry will typically do less R&D work than would be optimal for society. This is because R&D activity often produces “positive externalities;” i.e. benefits to people other than the person doing the R&D. The federal R&D credit reduces the after-tax cost of R&D investments, which should lead to an increase in R&D activity. Since state R&D credits also reduce the after-tax cost of R&D, they too will induce an increase in the overall level of R&D spending. The second purpose of the federal R&D credit is to encourage taxpayers to do their R&D in the United States, rather than in another country.

Since the structure of the California R&D credit generally conforms to that of the federal credit, the California credit will produce both of these same effects. It will contribute to an overall increase in R&D activity, and it will encourage R&D activity to be undertaken in California rather than elsewhere. Because California’s contribution to total R&D spending is smaller than the federal government’s contribution, the first effect – global increases in R&D activity -- is somewhat less important to state policy than to federal policy. The second effect -- regional competition -- is a relatively more important motivator for state policy. This is because it may be easier for some R&D firms to move their activity to another state than it would be for them to move it to another country, and many states besides California offer R&D credit. Therefore, a California credit may be necessary for the state to remain competitive with these other states in attracting and maintaining research business activity.

Both effects of the California R&D credit, the increase in the overall amount of R&D activity, and the increase in the proportion of this activity that takes place in California, must be considered in evaluating the success of the California R&D credit. The desirability of the increase in overall R&D activity is dependent on the level of the federal R&D credit (and credits offered by other states and countries). If the federal credit is too low, the added R&D incentives provided by states collectively could generate productive additional R&D activity. Alternatively, if the federal credit has already induced optimal levels of R&D, any increases in overall R&D spending induced by additional state credits will be inefficient and hurt overall economic performance. It is not known whether the federal R&D credit is currently set at the optimal level.

The R&D credit may be viewed as successfully maintaining the competitiveness of the California R&D industry only if R&D activity is undertaken in California that would not have been undertaken here in the absence of the credit. The amount of R&D activity that would not have taken place in California in the absence of the credit is unknown. Credits granted for R&D that would have occurred even in the absence of the credit may be considered a windfall.

There are two possible benefits to attracting the R&D business to California. The first is the addition of the R&D jobs themselves. If this were the only benefit, the R&D industry should be singled out for this special benefit only if jobs in this industry are substantially more desirable than jobs in other industries in the state. The second potential benefit from bringing R&D to California

is that other California businesses may be able to adopt innovations developed locally more rapidly than they can adopt innovations developed elsewhere. If this is the case, many California businesses, not just those receiving this credit, will gain an advantage over their rivals in other states. This advantage is not a result of being able to obtain technological information more quickly. Given the global communications network, information can be transported across continents relatively quickly and without cost. The advantage to California may come through something economists call *economies of agglomeration*. *Economies of agglomeration* are defined as “a reduction in production costs that results when firms in the same or related industries locate near one another.”

Thus, for example, if the R&D credit encourages some pharmaceutical companies to locate their research facilities in an area of California, that will, likewise, encourage the growth of pharmaceutical research support firms (such as material suppliers, pharmaceutical manufacturers, universities doing biological and chemical research, chemical engineers) to be attracted to that area. Subsequently, with the growth of the support industries, other pharmaceutical firms will be attracted to the area. There are clearly many agglomeration economies within California (high-technology in Silicon Valley and motion pictures in Hollywood are two obvious examples). However, many factors contribute to the development and growth of agglomeration economies. Because of the complexity of agglomeration economies, the extent to which the California R&D 20 credit has actually encouraged the development or growth of any agglomeration economies is not known.

We also note that less than one-third of this credit is actually available to reduce tax in the year that it is generated. The inability to use the credit (because of a lack of tax to reduce) undoubtedly reduces the incentive provided by the existence of the credit.

Analyst John Pavalasky
Telephone # (916) 845-4335
Attorney Douglas Powers

FRANCHISE TAX BOARD'S
PROPOSED AMENDMENTS TO AB 1527
As Introduced February 23, 2007

AMENDMENT 1

On page 5, line 28, after "until" strikeout "January 1, 2013" and insert:
December 1, 2013

AMENDMENT 2

On page 5, line 30, after "before" strikeout "January 1, 2013" and insert:
December 1, 2013

AMENDMENT 3

On page 7, line 9, after "until" strikeout "January 1, 2013" and insert:
December 1, 2013

AMENDMENT 4

On page 7, line 18, before "may be sold" strikeout "buyer" and insert:
seller

AMENDMENT 5

On page 7, line 32, before "for" strikeout "board" and insert:
Franchise Tax Board

AMENDMENT 6

On page 10, line 22, after "until" strikeout "January 1, 2013" and insert:
December 1, 2013

AMENDMENT 7

On page 10, line 24, after "before" ~~strikeout~~ "January 1, 2013" and insert:
December 1, 2013

AMENDMENT 8

On page 12, line 3, after "until" ~~strikeout~~ "January 1, 2013" and insert:
December 1, 2013

AMENDMENT 9

On page 12, line 12, before "may be sold" ~~strikeout~~ "buyer" and insert:
seller

AMENDMENT 10

On page 12, line 26, before "for" ~~strikeout~~ "board" and insert:
Franchise Tax Board